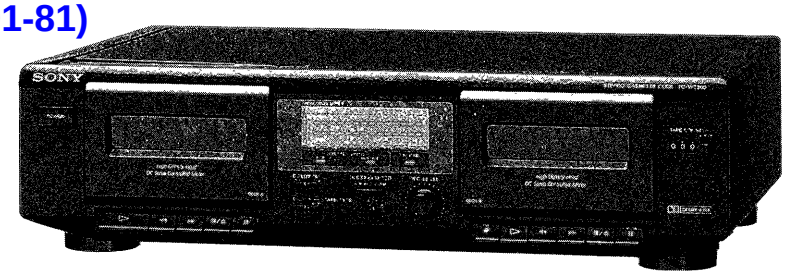
TC-WE305

SERVICE MANUAL

Ver 1.2 2003.12
With SUPPLEMENT-1
(9-960-691-81)



US Model
Canadian Model
AEP Model
E Model
Australian Model
PX Model

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ▯▯ are trademarks of Dolby Laboratories Licensing Corporation.

Model Name Using Similar Mechanism		NEW
Tape Transport Machanism Type	DECK A	TCM-YS47CZ-19
	DECK B	TCM-YS47CZ-18

SPECIFICATIONS

System

Recording system
4-track 2-channel stereo

Fast-winding time (approx.)
120 sec. (with Sony C-60 cassette)

Bias
AC bias

Signal-to-noise ratio (at peak level and weighted with Dolby NR off)
Type I tape, Sony Type I (NORMAL): 55 dB
Type II tape, Sony Type II (HIGH): 57 dB
Type IV tape, Sony Type IV (METAL): 58 dB

S/N ratio improvement (approximate values)
With Dolby NR on: 5 dB at 1 kHz, 10 dB at 5 kHz

Harmonic distortion
0.4% (with Type I tape, Sony Type I (NORMAL): 160 nWb/m 315 Hz, 3rd H.D.)
1.8% (with Type IV tape, Sony Type IV (METAL): 250 nWb/m 315 Hz, 3rd H.D.)

Frequency response (Dolby NR off)
Type I tape, Sony Type I (NORMAL):
30 - 14,000 Hz (±3 dB, IEC)
20 - 15,000 Hz (±6 dB)
Type II tape, Sony Type II (HIGH):
30 - 15,000 Hz (±3 dB, IEC)
20 - 16,000 Hz (±6 dB)
Type IV tape, Sony Type IV (METAL):
30 - 15,000 Hz (±3 dB, IEC)
20 - 16,000 Hz (±6 dB)
30 - 13,000 Hz (±3 dB, –4 dB recording)

— Continued on page 2 —

STEREO CASSETTE DECK

9-960-691-13
2003L02-1
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Sony Corporation
Home Audio Company
Published by Sony Engineering Corporation

SONY®

Inputs

Line inputs (phono jacks)
Sensitivity : 0.16 V
Input impedance : 47 kilohms

Outputs

Line outputs (phono jacks)
Rated output level : 0.5 V at a load impedance of 47 kilohms
Load impedance : Over 10 kilohms

General

Power requirements

Where purchased	Power requirements
US, Canadian model	120V AC, 60Hz
AEP, Singapore model	220 – 230V AC, 50/60Hz
Australian model	240V AC, 50/60Hz
E , PX model	120/220/240V AC, 50/60Hz

Power consumption
15 W (Continental Europe)
27 W (Other countries)

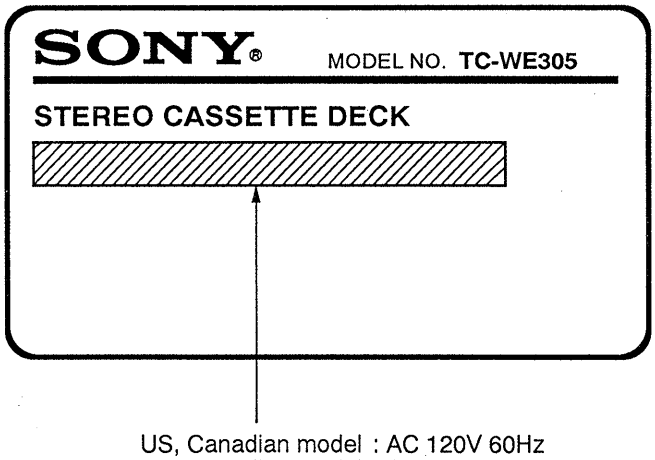
Dimensions (approx.)
430 × 120 × 305 mm (w/h/d)
(17 × 4 3/4 × 12 1/8 inches)
including projecting parts and controls

Mass (approx.)
3.3 kg (7 lbs 4 oz)

Supplied accessories
Audio connecting cords (2 phono plugs - 2 phono plugs) (2)

Design and specifications are subject to change without notice.

MODEL IDENTIFICATION



US, Canadian model : AC 120V 60Hz
Australian model : AC 240V~50/60Hz
AEP, Singapore model : AC 220-230V~50/60Hz
E, PX model : AC120/220/240V~50/60Hz

TABLE OF CONTENTS

Specifications ····· 1
Safety Check-out ····· 3

1. GENERAL
Identifying the Parts ····· 4

2. DISASSEMBLY
2-1. Front Panel Removal ····· 5
2-2. Mechanism Deck Removal ····· 5

3. ADJUSTMENTS
3-1. Mechanical Adjustments ····· 6
3-2. Electrical Adjustments ····· 6

4. DIAGRAMS
4-1. Printed Wiring Boards ····· 10
4-2. Schematic Diagram ····· 13

5. EXPLODED VIEWS
5-1. Chassis Section ····· 17
5-2. Front Panel Section ····· 18
5-3. Mechanism Deck Section 1 ····· 19
5-4. Mechanism Deck Section 2 ····· 20

6. ELECTRICAL PARTS LIST ····· 21

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

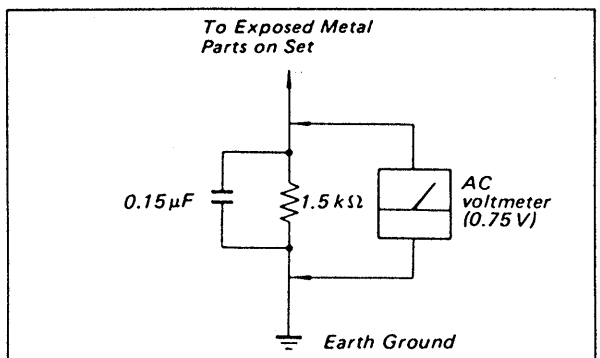


Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

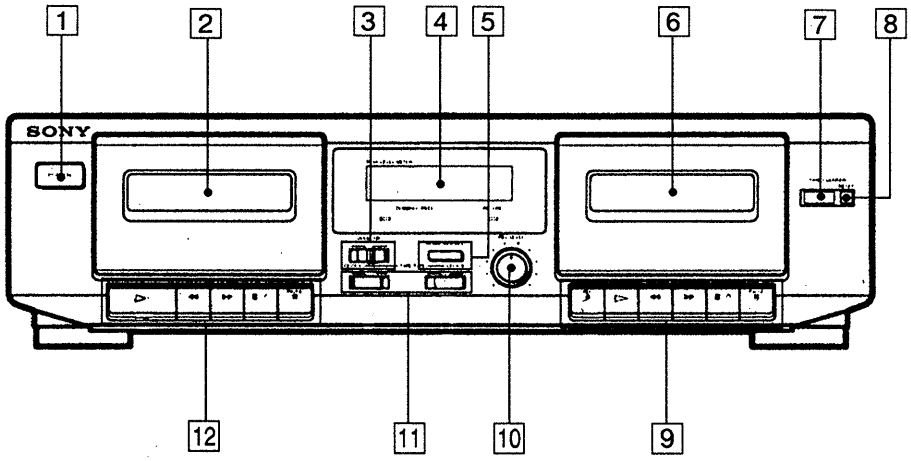
COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1
GENERAL

IDENTIFYING THE PARTS



1 POWER switch
2 Deck-A
3 DOLBY NR ON/OFF switch
4 Display
5 DUBBING SPEED HIGH/NORM switch
6 Deck-B
7 TAPE COUNTER
8 RESET (COUNTER) button
9 Tape operation buttons (Deck-B)
- ● REC (record) button
- ▷ (play) button
- ◀◀ (leftward fastwinding) button
- ▶▶ (rightward fastwinding) button
- ■ / ⏏ (stop/eject) button
- II PAUSE button

10 REC (recording) LEVEL control
11 TAPE TYPE selector
- I (Normal)
- II / IV (CrO_2 /Metal) } Deck-A
- I (Normal)
- II (CrO_2) } Deck-B
- IV (Metal)

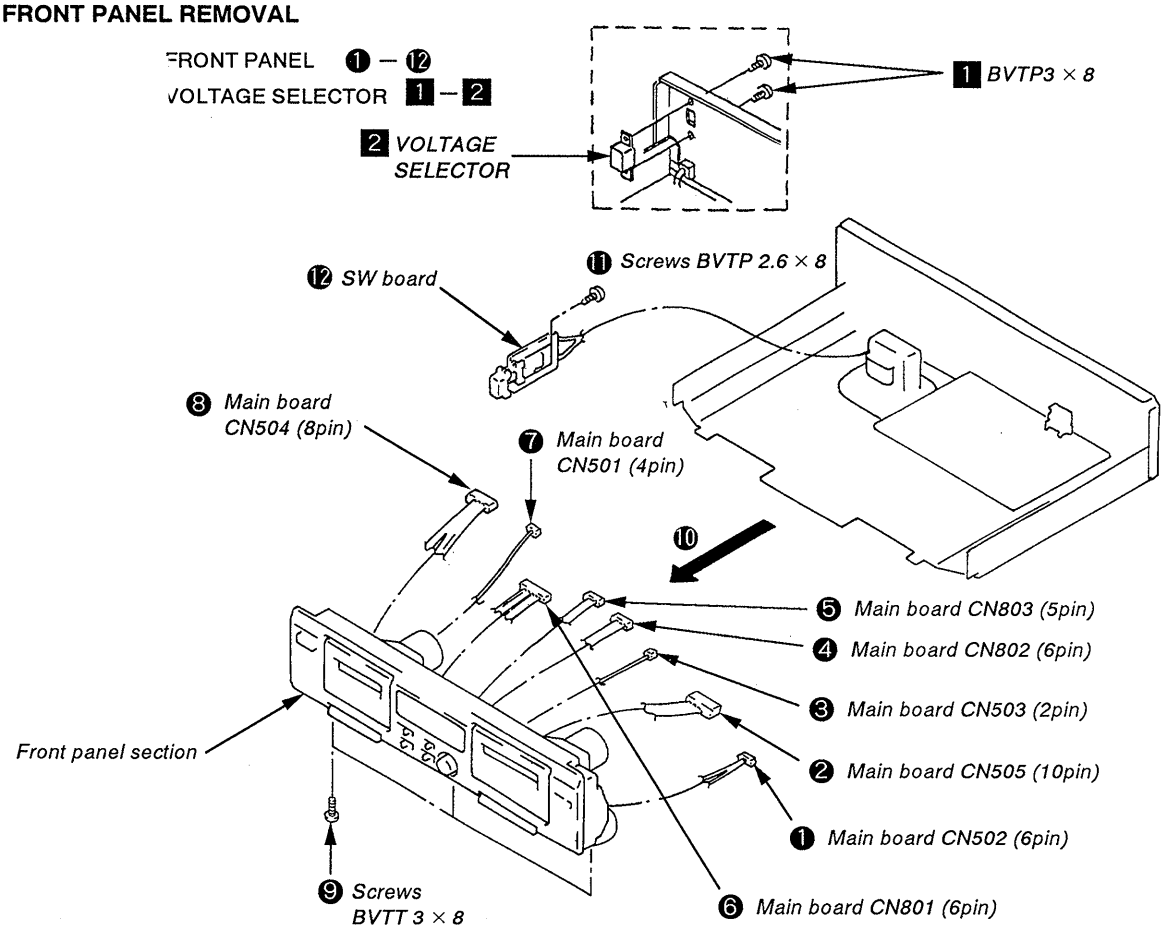
12 Tape operation buttons (Deck-A)
- ▷ (play) button
- ◀◀ (leftward fastwinding) button
- ▶▶ (rightward fastwinding) button
- ■ / ⏏ (stop/eject) button
- II PAUSE button

SECTION 2
DISASSEMBLY

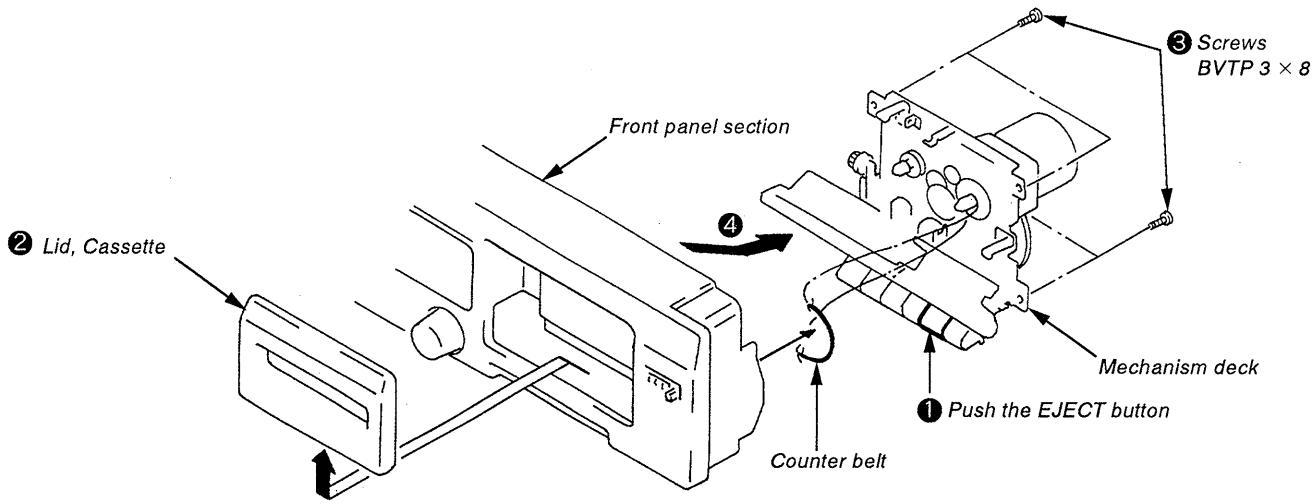
Note : Follow the disassembly procedure in the numerical order given.

CASE
Unscrew the four case attachment screws M3 × 8 and remove the case.

2-1. FRONT PANEL REMOVAL


FRONT PANEL ❶ – ⓬
VOLTAGE SELECTOR 1 – 2
2 VOLTAGE SELECTOR
1 BVTP3 × 8
⓬ SW board
⓫ Screws BVTP 2.6 × 8
❽ Main board CN504 (8pin)
❼ Main board CN501 (4pin)
❿
❺ Main board CN803 (5pin)
❹ Main board CN802 (6pin)
❸ Main board CN503 (2pin)
❷ Main board CN505 (10pin)
❶ Main board CN502 (6pin)
Front panel section
❾ Screws BVTT 3 × 8
❻ Main board CN801 (6pin)

2-2. MECHANISM DECK REMOVAL



SECTION 3
ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured alcohol-moistened swab:
   record/playback/erase head pinch roller
   rubber belts capstan
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustment.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

- **Torque Measurement**

Torque	Torque meter	Meter reading
Forward	CQ-102C	30 to 70g • cm (0.42 to 0.97 oz • inch)
Forward back tension	CQ-102C	DECK-A : 1.5 to 5.5g • cm (0.020 to 0.076 oz • inch) DECK-B : 1.5 to 7g • cm (0.020 to 0.096 oz • inch)
FF/REW	CQ-201B	60g•cm or more (0.83 oz•inch or more)

- **Tape Tension Measurement**

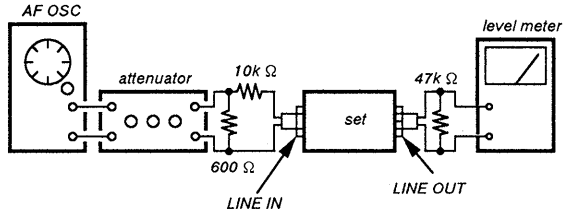
Mode	Tension meter	Meter reading
FWD	CQ-403A	more than 100g (3.53 oz)

3-2. ELECTRICAL ADJUSTMENTS

PRECAUTION

1. The adjustment should be performed in the publication.
   (Be sure to male playback adjustment at first.)
2. The adjustments and measurement should be performed for both L-CH and R-CH.
   - Switch position
     DOLBY NR switch : OFF
     TAPE TYPE switch : TYPE I (NORMAL)
     REC level : min
   - Standard record position :
     Deliver the standard input signal level to input jack and set the REC LEVEL control to obtain the standard output signal level as follows.

– Record Mode –



Standard Input Level

Input terminal	LINE IN
source impedance	10k Ω
input signal level	0.5V (– 3.8dB)

Standard Output Level

Output terminal	LINE OUT
load impedance	47k Ω
output signal level	0.5V (– 3.8dB)

Test Tape

Tape	Contents	Use
P-4-A100	10kHz, – 10dB	Azimuth Adjustment
P-4-L300	315Hz, 0dB	PB Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

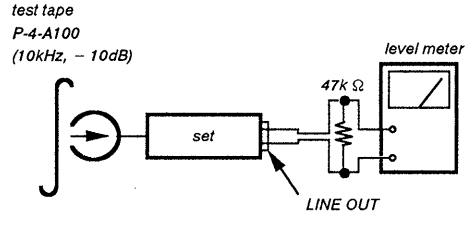
0dB=0.775V

Record/Playback Head Azimuth Adjustment

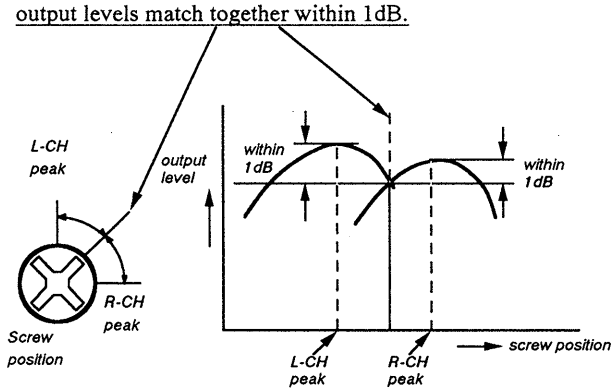
DECK-A DECK-B

Procedure :

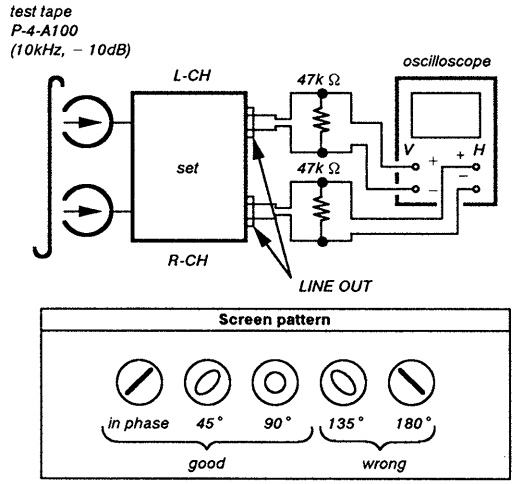
1. Forward playback Mode



2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1dB.

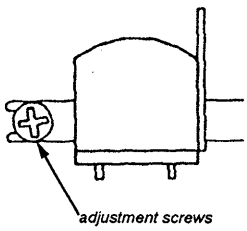


3. Playback Mode



4. Change the reveres playback mode and repeat the steps 1 to 3.
5. After the adjustment, lock the adjustment screws with suitable locking compound.

Adjustment Location : – record/playback head –

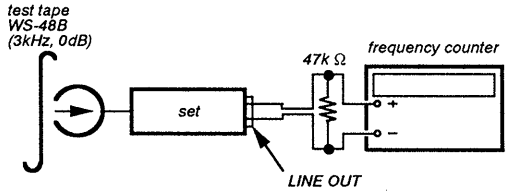


Tape Speed Adjustment DECK-A DECK-B

Procedure :

- Perform high speed adjustment before normal speed adjustment.

Mode : FWD playback



Specifications :

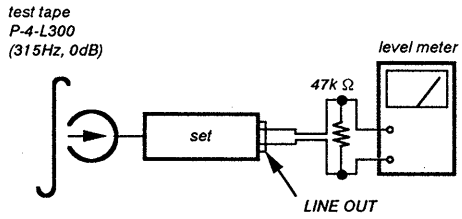
	Adjustment part		CNP506	Frequency counter
High speed	Deck A	RV501	SHORT	5980 to 6020Hz
	Deck B	RV503		
Normal speed	Deck A	RV502	OPEN	2990 to 3010Hz
	DEck B	RV504		

Adjustment Location : MAIN board (see page 9)

Playback Level Adjustment DECK-A DECK-B

Procedure :

Mode : FWD playback



DECK A is RV101 (L-CH) and RV201 (R-CH),
DECK B is RV102 (L-CH) and RV202 (R-CH)
so that adjustment within the following adjustment level.

Adjustment Level :

LINE OUT level : – 7.7 ± 0.5dB (0.30 to 0.34V)
Level difference between channels : within 0.5dB

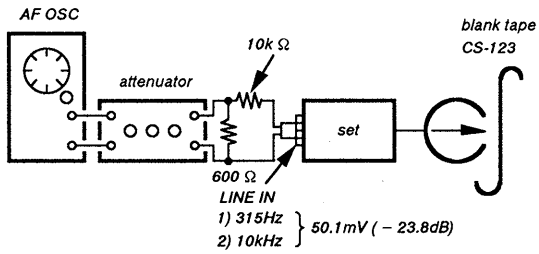
Record Bias Adjustment DECK-B

Setting :

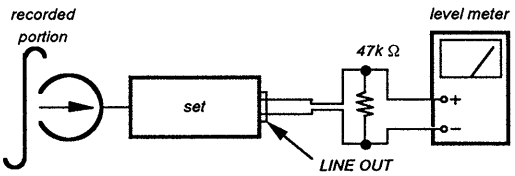
TAPE SELECT : TYPE - I (DECK-B)

Procedure :

1. Record Mode



2. Playback Mode



Confirm that the 10kHz playback output is 0 ± 0.5dB relative to the 315Hz output. If necessary, adjust RV105 (L-CH), RV205 (R-CH) and repeat the steps given above.

Adjustment Location : MAIN board (see page 9)

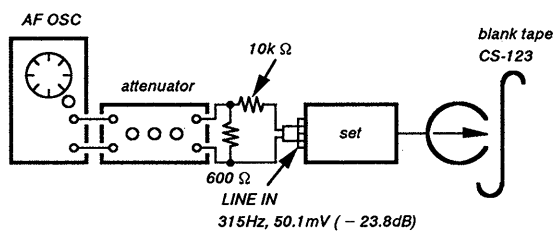
Record Level Adjustment DECK-B

Setting :

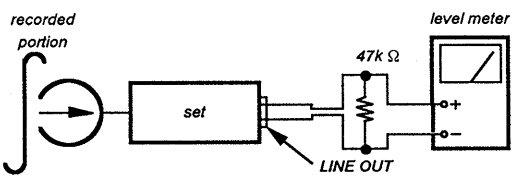
TAPE SELECT : TYPE - I (DECK-B)

Procedure :

1. Record Mode



2. Playback Mode



Confirm playback the tape recorded become adjustment level as follows.

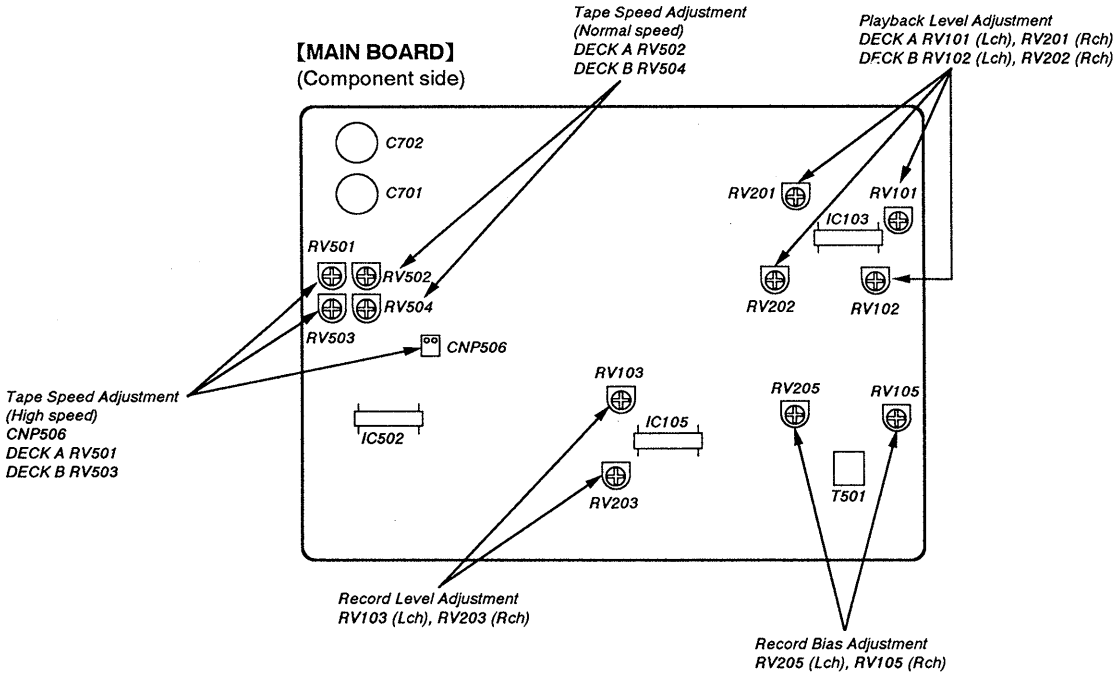
If necessary, adjust RV103 (L-CH), RV203 (R-CH) and repeat the steps 1 and 2.

Adjustment Level :

LINE OUT level : – 23.8 ± 0.5dB (47.2 to 53mV)

Adjustment Location : MAIN board (see page 9)

Adjustment Location : MAIN board



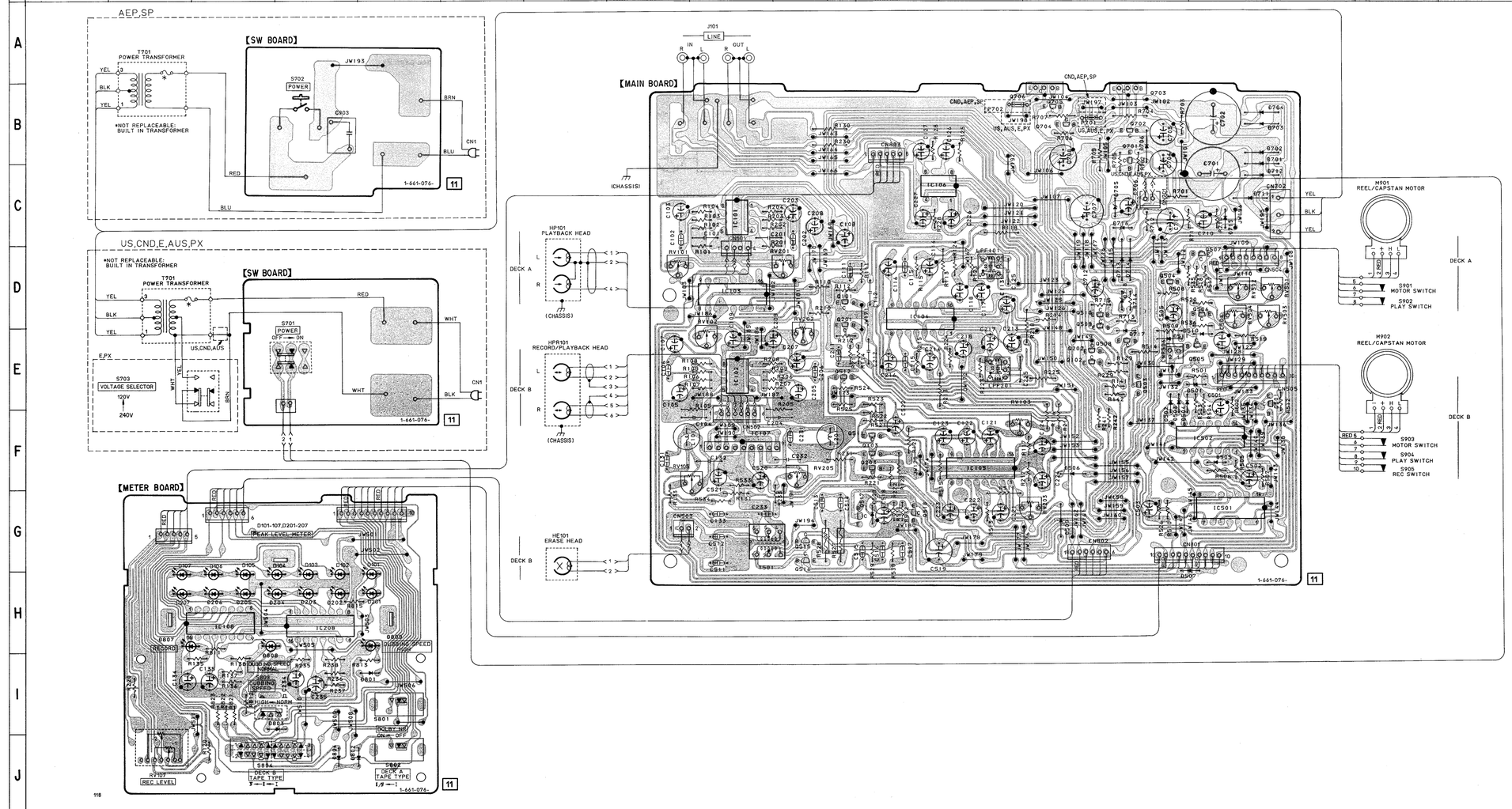
4-1. PRINTED WIRING BOARDS

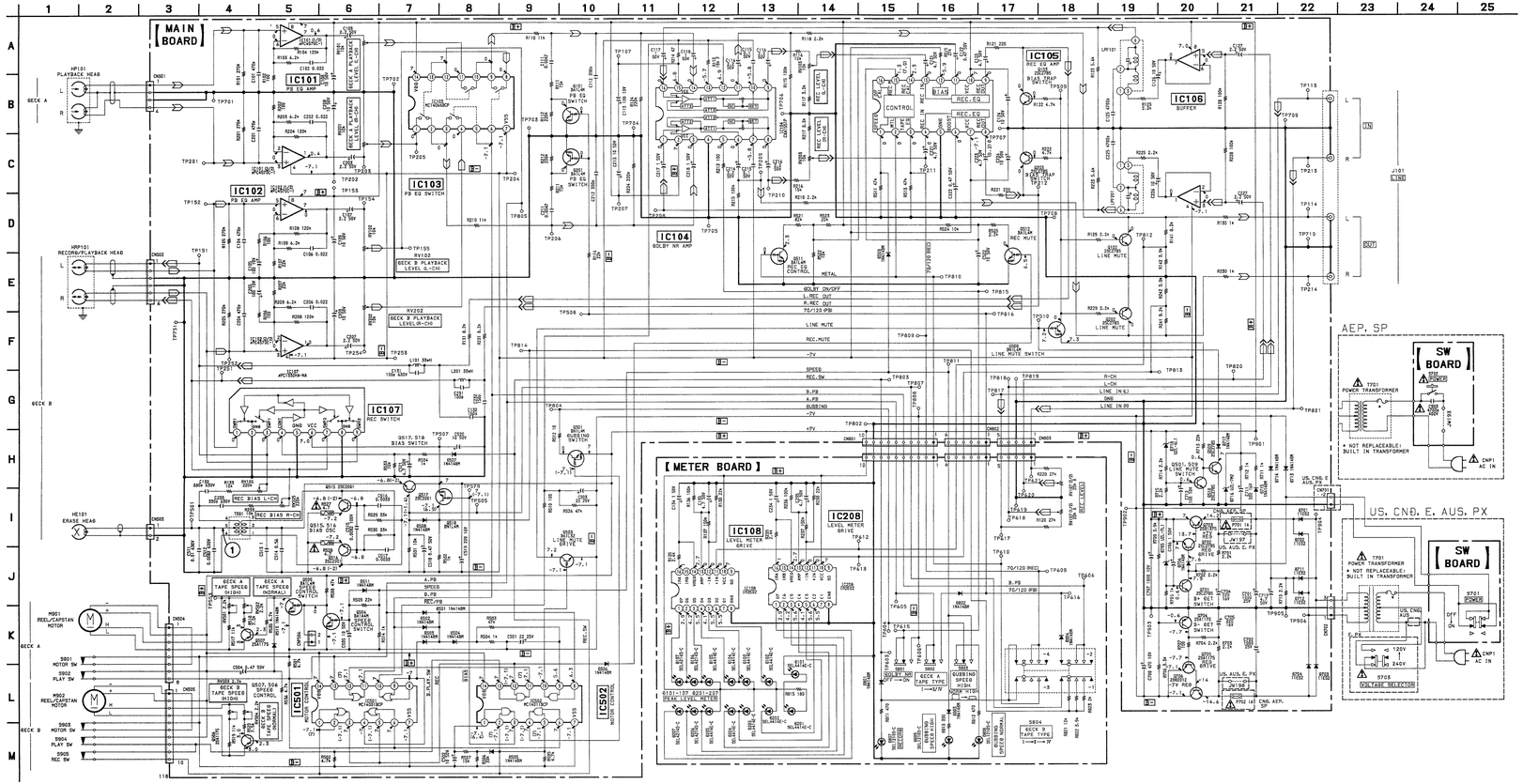
• SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location
D101	H - 5	D808	H - 3
D102	H - 4	D809	H - 5
D103	H - 4		
D104	H - 4		
D105	H - 3	IC101	C - 9
		IC102	E - 9
D106	H - 3	IC103	D - 9
D107	H - 2	IC104	D - 11
D201	H - 5	IC105	F - 12
D202	H - 4		
D203	H - 4	IC106	C - 12
		IC107	F - 9
D204	H - 4	IC108	H - 3
D205	H - 3	IC208	H - 4
D206	H - 3	IC501	G - 15
D207	H - 2		
D501	E - 15	IC502	F - 15
D502	E - 14		
D503	E - 14	Q101	D - 10
D504	E - 15	Q102	E - 13
D505	F - 15	Q103	F - 11
D506	F - 13	Q201	D - 10
		Q202	E - 13
D507	G - 15		
D508	G - 11	Q203	F - 11
D509	G - 13	Q501	E - 16
D510	E - 15	Q503	E - 14
D511	E - 14	Q504	D - 14
		Q505	E - 15
D701	B - 15		
D702	B - 15	Q506	D - 15
D703	B - 15	Q507	D - 15
D704	B - 15	Q508	E - 14
D705	C - 14	Q509	D - 13
		Q510	D - 13
D706	B - 14		
D711	C - 15	Q511	F - 11
D712	C - 15	Q512	E - 10
D713	D - 14	Q515	G - 10
D714	D - 14	Q516	G - 10
		Q517	G - 11
D715	C - 15		
D716	C - 14	Q518	G - 11
D717	E - 14	Q701	B - 14
D718	D - 14	Q702	B - 14
D801	I - 5	Q703	B - 14
		Q704	B - 13
D802	J - 5		
D803	I - 4	Q705	B - 13
D804	J - 4	Q706	B - 13
D807	H - 2		

Note:

- ○— : parts extracted from the component side.
- △ : internal component.
- ▒▒▒ : Pattern from the side which enables seeing.
- Abbreviations
  CND : Canadian
  SP : Singapore
  AUS : Australian





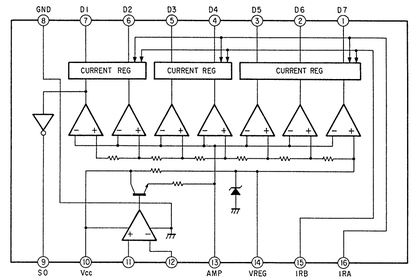
— 13 —

— 14 —

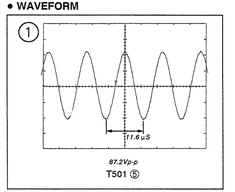
— 15 —

● IC BLOCK DIAGRAM

IC108, 208 IR2E02



● WAVEFORM



Note :

- All capacitors are in μ F unless otherwise noted. pF: μ μ F 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- % : indicates tolerance.
- Δ : internal component.
- : fusible resistor.
- : panel designation.

Note :	Note :
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- B+ : B+ Line
- B− : B − Line
- : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : PLAY
  ( ) : REC
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : PB (DECK A)
  : PB (DECK B)
  : REC (DECK B)
- Abbreviations
  CND : Canadian
  SP : Singapore
  AUS : Australian

SECTION 5
EXPLODED VIEWS

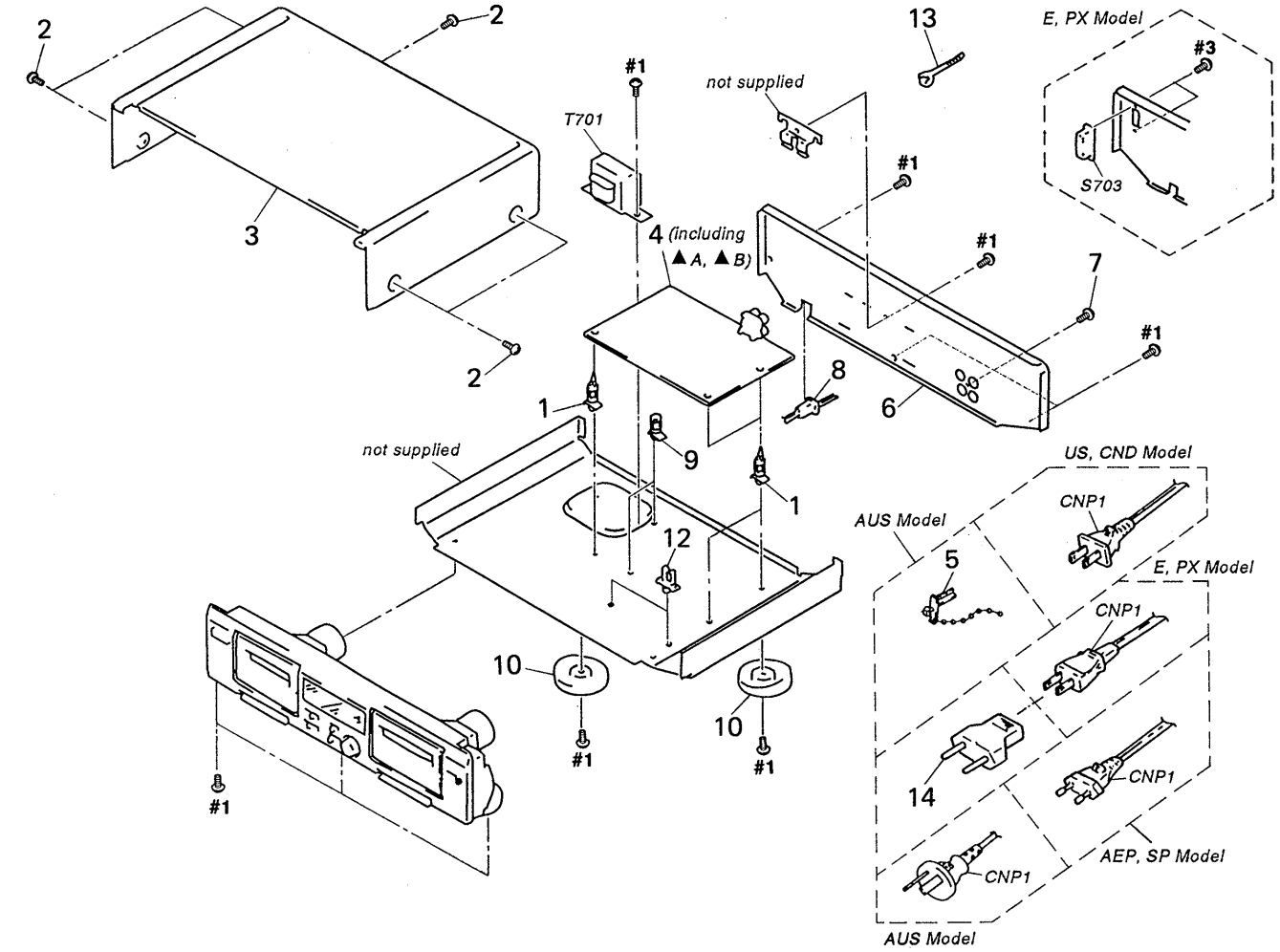
NOTE :

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  CND : Canadian SP : Singapore
  AUS : Australian

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

5-1. CHASSIS SECTION

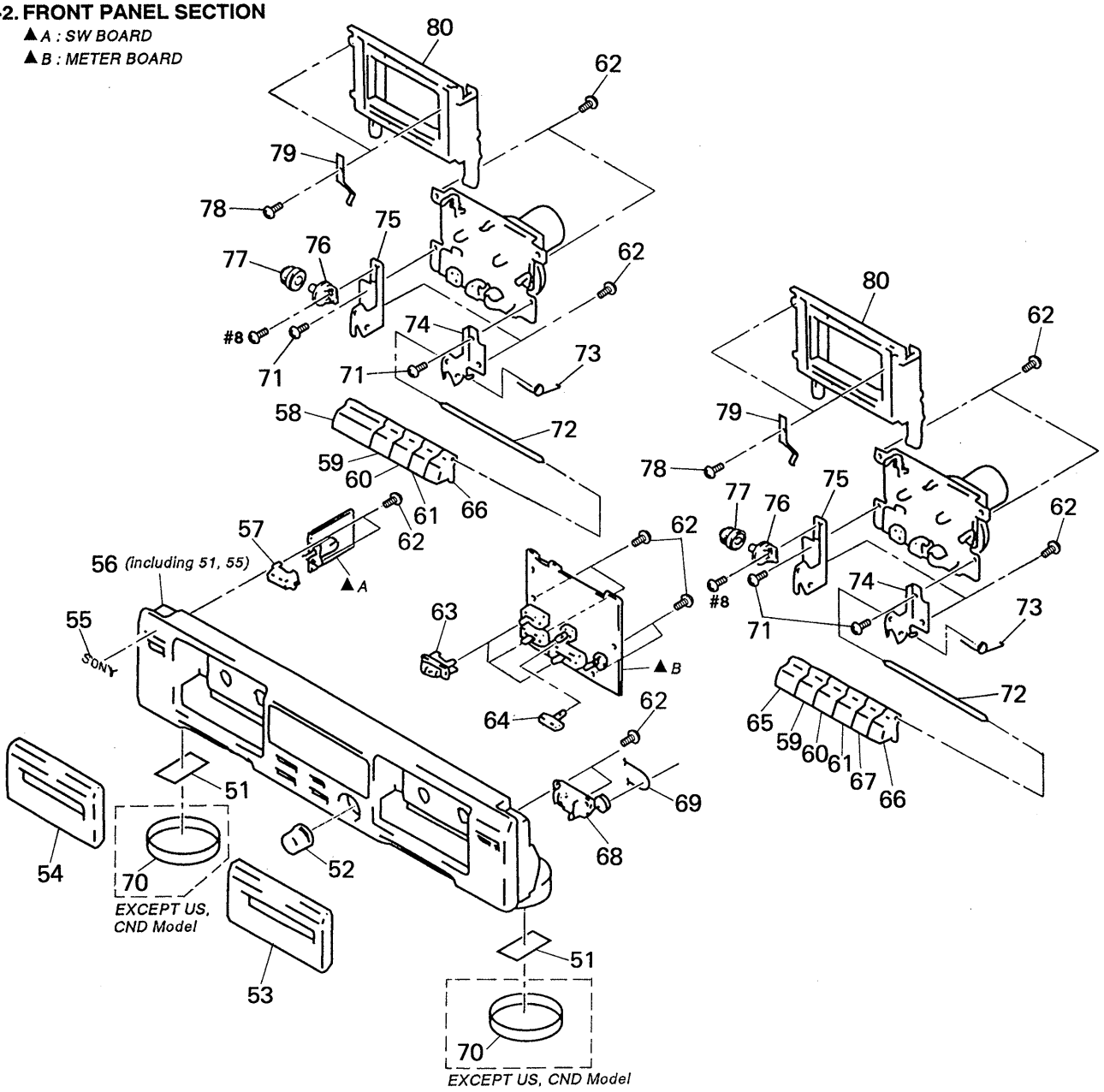


Ref. No.	Part No.	Description	Remark
* 1	3-346-265-11	HOLDER, PC BOARD	
2	3-363-099-01	SCREW (CASE 3 TP2)	
* 3	3-935-634-01	CASE	
* 4	A-2007-564-A	MAIN BOARD, COMPLETE (US,AUS)	
* 4	A-2007-589-A	MAIN BOARD, COMPLETE (AEP,SP,E,PX)	
* 4	A-2007-594-A	MAIN BOARD, COMPLETE (CND)	
5	4-956-370-12	BAND, PLUG FIXED (AUS)	
* 6	3-935-621-01	PANEL, BACK (US)	
* 6	3-935-621-11	PANEL, BACK (CND)	
* 6	3-935-621-21	PANEL, BACK (AEP)	
* 6	3-935-621-31	PANEL, BACK (E,PX)	
* 6	3-935-621-41	PANEL, BACK (AUS)	
* 6	3-935-621-51	PANEL, BACK (SP)	
7	3-704-515-01	SCREW (BV/RING)	
* 8	3-703-244-00	BUSHING (2104), CORD (AEP,SP,AUS)	
8	3-703-571-11	BUSHING (S) (4516), CORD (US,CND,E,PX)	

Ref. No.	Part No.	Description	Remark
* 9	3-669-610-00	SPACER	
10	4-977-591-01	FOOT (F50150S)(EXCEPT US,CND)	
10	4-977-591-11	FOOT (F50150S)(US,CND)	
12	2-122-805-01	CLAMP, CORD	
* 13	3-847-356-02	CLAMP	
⚠14	1-569-007-11	ADAPTOR, CONVERSION 2P (E)	
⚠CNP1	1-558-945-21	CORD, POWER (POLAR.SPT-1)(US,CND)	
⚠CNP1	1-777-107-11	CORD, POWER (AEP,SP)	
⚠CNP1	1-777-217-11	CORD, POWER (E,PX)	
⚠CNP1	1-777-218-11	CORD, POWER (AUS)	
⚠S703	1-692-155-11	SELECTOR, POWER VOLTAGE (E,PX)	
⚠T701	1-429-716-11	TRANSFORMER, POWER (US,CND)	
⚠T701	1-429-717-11	TRANSFORMER, POWER (AEP,SP)	
⚠T701	1-429-718-11	TRANSFORMER, POWER (E,PX)	
⚠T701	1-429-827-11	TRANSFORMER, POWER (AUS)	

5-2. FRONT PANEL SECTION

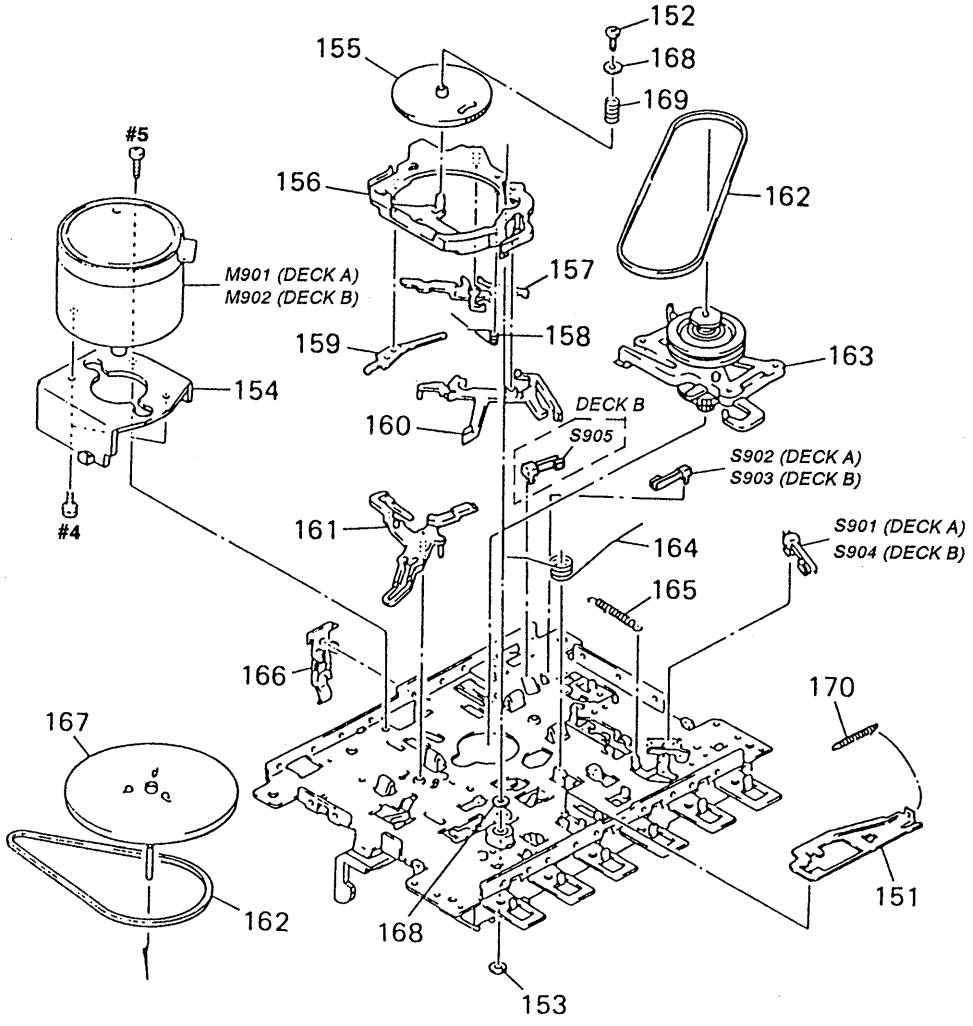
▲A : SW BOARD
▲B : METER BOARD



Ref. No.	Part No.	Description	Remark
* 51	4-978-398-21	CUSHION	
52	3-935-623-01	KNOB (REC)	
53	A-2004-584-A	PANEL ASSY, FRONT(US,CND)	
53	A-2004-597-A	PANEL ASSY, FRONT (EXCEPT US,CND)	
54	A-2004-588-A	LID ASSY (R), CASSETTE	
55	4-963-404-21	EMBLEM (5-A), SONY	
56	A-2004-587-A	LID ASSY (L), CASSETTE	
57	3-931-429-11	BUTTON (POWER)	
58	3-935-628-01	BUTTON (PLAY)	
59	3-935-631-01	BUTTON (MD)	
60	3-935-631-11	BUTTON (MD)	
61	3-935-631-21	BUTTON (MD)	
62	4-951-620-01	SCREW (2.6X8), +BVTP	
63	3-935-625-01	KNOB (SL)	
64	3-935-624-01	BUTTON (DB)	
65	3-935-630-01	BUTTON (REC)	

Ref. No.	Part No.	Description	Remark
66	3-935-629-01	BUTTON (PAUSE)	
67	3-935-631-31	BUTTON (MD)	
68	1-251-440-11	COUNTER, TAPE	
69	3-315-405-00	BELT	
70	3-936-864-01	RING (L), ORNAMENTAL(EXCEPT US,CND)	
71	3-918-741-01	SCREW	
* 72	3-931-794-01	BUTTON, SHAFT	
73	3-931-805-01	SPRING	
* 74	3-931-792-01	BUTTON (R), HOLDER	
* 75	3-931-793-01	BUTTON (L), HOLDER	
76	3-931-806-01	GEAR, HOLDER	
77	3-931-807-01	DAMPER, GEAR	
78	3-931-790-01	SCREW	
* 79	3-931-804-01	PLATE, KEEP	
80	3-931-803-01	CASE, CASSETTE	
#8	7-685-782-01	SCREW +PTT 2X5 (S)	

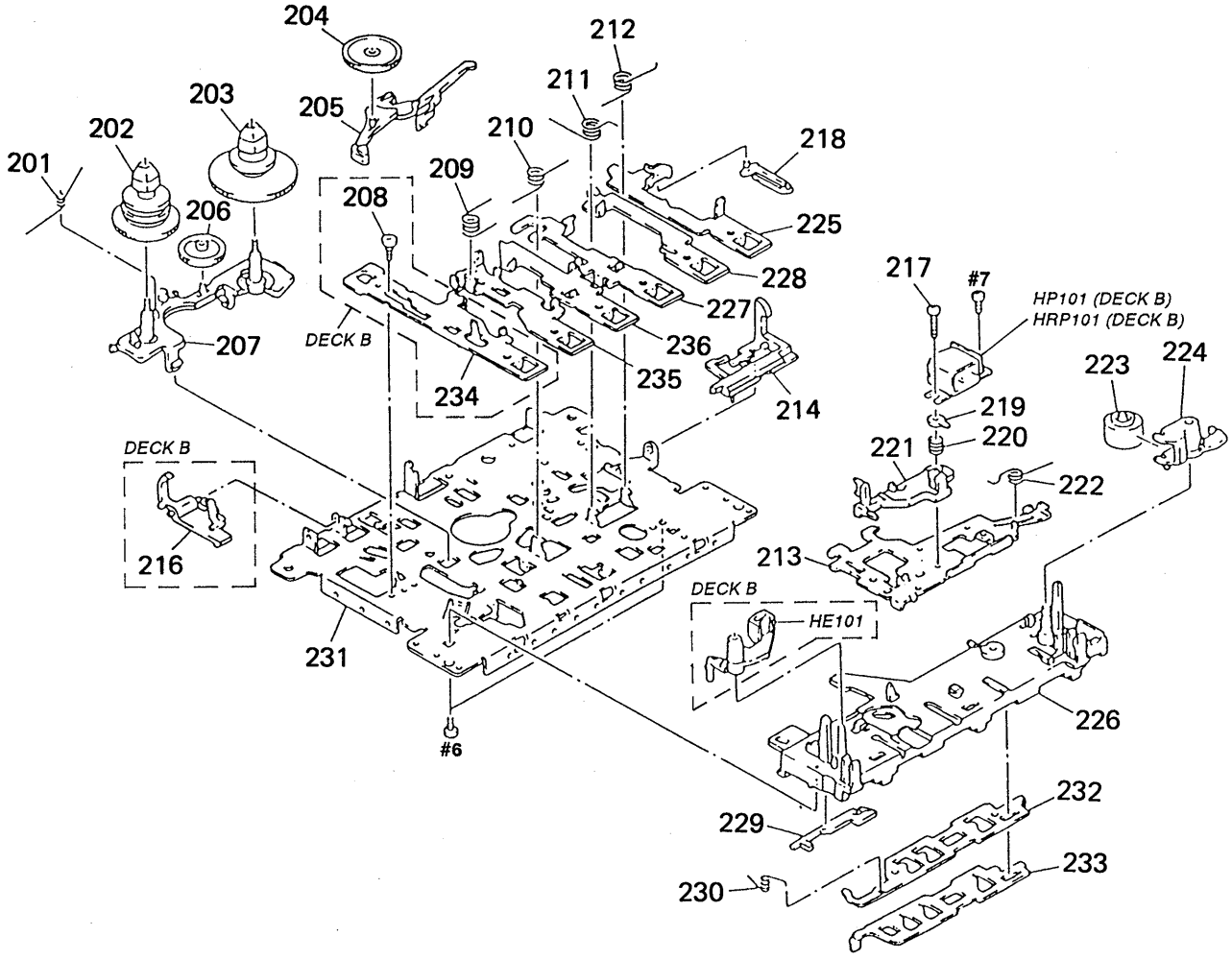
5-3. MECHANISM DECK SECTION 1
(TCM-YS47CZ-19 : DECK A)
(TCM-YS47CZ-18 : DECK B)



Ref. No.	Part No.	Description	Remark
151	3-379-844-01	PLATE, STOP, FR	
152	3-366-352-01	SCREW	
153	3-362-980-01	WASHER	
* 154	3-362-988-01	HOLDER, MOTOR	
155	X-3363-315-1	GEAR, CAM	
156	3-362-973-01	AS (BASE)	
157	3-362-976-01	LEVER, CONTROL	
158	3-362-977-01	SPRING	
159	3-362-978-01	SPRING, PLATE	
160	3-362-975-01	LEVER, SENSOR	
161	3-387-697-01	SENSOR	
162	3-362-989-01	BELT	
163	3-362-969-01	IDLER ASSY, PF	
164	3-362-970-01	SPRING	

Ref. No.	Part No.	Description	Remark
165	3-362-971-01	SPRING	
166	3-911-189-01	CASSETTE SPRING	
167	3-387-698-01	FW ASSY	
168	3-369-961-01	WASHER	
169	3-369-962-01	SPRING, COMPRESSION	
170	3-379-843-01	SPRING	
M901	1-698-845-11	REEL/CAPSTAN MOTOR (DECK A)	
M902	1-698-845-11	REEL/CAPSTAN MOTOR (DECK B)	
S901	1-692-434-11	LEAF SWITCH (MOTOR) (DECK A)	
S902	1-692-434-11	LEAF SWITCH (PLAY) (DECK A)	
S903	1-692-434-11	LEAF SWITCH (MOTOR) (DECK B)	
S904	1-692-434-11	LEAF SWITCH (PLAY) (DECK B)	
S905	1-692-434-11	LEAF SWITCH (REC) (DECK B)	

5-4. MECHANISM DECK SECTION 2
(TCM-YS47CZ-19 : DECK A)
(TCM-YS47CZ-18 : DECK B)



Ref. No.	Part No.	Description	Remark
201	3-917-805-01	SPRING	
202	X-3363-611-1	REEL, S	
203	3-362-962-01	REEL ASSY, T	
204	3-362-960-01	PULLEY, IDLER	
205	3-362-959-01	ARM, IDLER	
206	3-362-965-01	IDLER, FF	
207	3-362-961-01	SPINDLE (BASE)	
208	3-362-958-01	SCREW (DECK B)	
209	3-362-954-01	SPRING	
210	3-362-955-01	SPRING	
211	3-362-956-01	SPRING	
212	3-362-957-01	SPRING	
* 213	3-362-984-01	HEAD (BASE)	
214	3-362-968-01	LEVER, EJECT	
216	3-362-966-01	INTER LOCK (DECK B)	
217	3-363-229-01	SCREW	
218	3-362-953-01	ARM, PAUSE	
219	3-363-230-01	LUG	
220	3-362-985-01	SPRING	

Ref. No.	Part No.	Description	Remark
221	3-362-986-01	HOLDER, HEAD	
222	3-362-983-01	SPRING	
223	3-362-982-01	PINCH ROLLER	
224	3-362-981-01	PINCH ARM	
* 225	3-362-952-01	LEVER, PAUSE	
226	3-362-942-01	FRAME ASSY	
* 227	3-362-950-01	LEVER, FF	
* 228	3-362-951-01	LEVER, SE	
229	3-362-944-01	STOPPER, REC	
230	3-362-945-01	SPRING	
* 231	3-362-941-01	CHASSIS	
* 232	3-362-943-01	PLATE, FUNCTION	
* 233	3-362-946-01	LEVER, SW	
* 234	3-362-947-01	LEVER, REC (DECK B)	
* 235	3-362-948-01	LEVER, PLAY	
* 236	3-362-949-01	LEVER, REW	
HE101	1-543-673-11	ERASE HEAD (DECK B)	
HP101	1-543-672-11	PLAYBACK HEAD (DECK A)	
HRP101	1-543-672-11	PLAYBACK/RECORD HEAD (DECK B)	

SECTION 6
ELECTRICAL PARTS LIST

MAIN SW METER

NOTE :
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE :Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- SEMICONDUCTORS
  In each case, u : μ , for example :
  uA.... : μ A.... , uPA.... : μ PA....
  uPB.... : μ PB.... , uPC.... : μ PC....
  uPD.... : μ PD....
- CAPACITORS
  uF : μ F
- COILS
  uH : μ H
- Abbreviation
  CND : Canadian SP : Singapore
  AUS : Australian

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-2007-564-A	MAIN BOARD, COMPLETE (US,AUS)			
*	A-2007-589-A	MAIN BOARD, COMPLETE (AEP,E,SP,PX)			
*	A-2007-594-A	MAIN BOARD, COMPLETE (CND)			
		**********			
		SW BOARD			
		********			
		METER BOARD			
		**********			
*	1-535-688-11	TERMINAL			
		< CAPACITOR >			
C101	1-162-290-31	CERAMIC	470PF	10%	50V
C102	1-136-157-00	FILM	0.022uF	5%	50V
C103	1-126-961-11	ELECT	2.2uF	20%	50V
C104	1-162-290-31	CERAMIC	470PF	10%	50V
C105	1-124-443-00	ELECT	100uF	20%	10V
C106	1-136-157-00	FILM	0.022uF	5%	50V
C107	1-126-961-11	ELECT	2.2uF	20%	50V
C108	1-124-907-11	ELECT	10uF	20%	50V
C109	1-124-907-11	ELECT	10uF	20%	50V
C111	1-130-479-00	MYLAR	0.0047uF	5%	50V
C112	1-162-289-31	CERAMIC	390PF	10%	50V
C113	1-124-443-00	ELECT	100uF	20%	10V
C114	1-126-961-11	ELECT	2.2uF	20%	50V
C115	1-136-165-00	FILM	0.1uF	5%	50V
C116	1-126-961-11	ELECT	2.2uF	20%	50V
C117	1-124-903-11	ELECT	1uF	20%	50V
C118	1-124-903-11	ELECT	1uF	20%	50V
C121	1-126-963-11	ELECT	4.7uF	20%	50V
C122	1-124-902-00	ELECT	0.47uF	20%	50V
C123	1-126-963-11	ELECT	4.7uF	20%	50V
C124	1-124-907-11	ELECT	10uF	20%	50V
C125	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C126	1-124-907-11	ELECT	10uF	20%	50V
C127	1-126-961-11	ELECT	2.2uF	20%	50V
C131	1-136-433-11	FILM	100PF	5%	630V
C132	1-162-284-31	CERAMIC	150PF	10%	50V
C133	1-136-439-11	FILM	330PF	5%	630V
C134	1-124-903-11	ELECT	1uF	20%	50V
C135	1-126-963-11	ELECT	4.7uF	20%	50V
C201	1-162-290-31	CERAMIC	470PF	10%	50V
C202	1-136-157-00	FILM	0.022uF	5%	50V
C203	1-126-961-11	ELECT	2.2uF	20%	50V
C204	1-162-290-31	CERAMIC	470PF	10%	50V
C205	1-124-443-00	ELECT	100uF	20%	10V
C206	1-136-157-00	FILM	0.022uF	5%	50V
C207	1-126-961-11	ELECT	2.2uF	20%	50V
C208	1-124-907-11	ELECT	10uF	20%	50V
C209	1-124-907-11	ELECT	10uF	20%	50V
C211	1-130-479-00	MYLAR	0.0047uF	5%	50V
C212	1-162-289-31	CERAMIC	390PF	10%	50V
C213	1-124-907-11	ELECT	10uF	20%	50V
C214	1-126-961-11	ELECT	2.2uF	20%	50V
C215	1-136-165-00	FILM	0.1uF	5%	50V
C216	1-126-961-11	ELECT	2.2uF	20%	50V
C217	1-124-903-11	ELECT	1uF	20%	50V
C218	1-124-903-11	ELECT	1uF	20%	50V
C221	1-126-963-11	ELECT	4.7uF	20%	50V
C222	1-124-902-00	ELECT	0.47uF	20%	50V
C223	1-126-963-11	ELECT	4.7uF	20%	50V
C224	1-124-907-11	ELECT	10uF	20%	50V
C225	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C226	1-124-907-11	ELECT	10uF	20%	50V
C227	1-126-961-11	ELECT	2.2uF	20%	50V
C231	1-136-433-11	FILM	100PF	5%	630V
C232	1-162-284-31	CERAMIC	150PF	10%	50V
C233	1-136-439-11	FILM	330PF	5%	630V
C234	1-124-903-11	ELECT	1uF	20%	50V
C235	1-126-963-11	ELECT	4.7uF	20%	50V
C501	1-126-233-11	ELECT	22uF	20%	50V
C502	1-124-907-11	ELECT	10uF	20%	50V
C503	1-126-233-11	ELECT	22uF	20%	50V
C504	1-124-902-00	ELECT	0.47uF	20%	50V

MAIN SW METER

Ref. No.	Part No.	Description			Remark
C505	1-124-907-11	ELECT	10uF	20%	50V
C511	1-136-601-11	FILM	0.01uF	5%	630V
C512	1-136-562-11	FILM	0.0082uF	5%	630V
C513	1-136-177-00	FILM	1uF	5%	50V
C514	1-136-174-00	FILM	0.56uF	5%	50V
C515	1-106-365-00	MYLAR	0.0082uF	5%	100V
C516	1-106-355-12	MYLAR	3300PF	5%	200V
C517	1-106-355-12	MYLAR	3300PF	5%	200V
C518	1-124-902-00	ELECT	0.47uF	20%	50V
C519	1-124-120-11	ELECT	220uF	20%	25V
C520	1-124-907-11	ELECT	10uF	20%	50V
C521	1-126-963-11	ELECT	4.7uF	20%	50V
C522	1-124-907-11	ELECT	10uF	20%	50V
C701	1-124-557-11	ELECT	1000uF	20%	25V
C702	1-124-557-11	ELECT	1000uF	20%	25V
C704	1-124-120-11	ELECT	220uF	20%	25V
C705	1-124-120-11	ELECT	220uF	20%	25V
C706	1-124-903-11	ELECT	1uF	20%	50V
C707	1-124-473-11	ELECT	1000uF	20%	10V
C708	1-124-472-11	ELECT	470uF	20%	10V
C710	1-126-963-11	ELECT	4.7uF	20%	50V
C711	1-124-119-00	ELECT	330uF	20%	16V
C712	1-124-443-00	ELECT	100uF	20%	10V
⚠C903	1-165-170-11	CERAMIC	0.0047uF	20%	400V (AEP,SP)
		< CONNECTOR >			
CN501	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P			
* CN502	1-691-577-11	PIN, CONNECTOR (PC BOARD) 6P			
* CN503	1-691-573-11	PIN, CONNECTOR (PC BOARD) 2P			
* CN504	1-691-579-11	PIN, CONNECTOR (PC BOARD) 8P			
* CN505	1-691-581-11	PIN, CONNECTOR (PC BOARD) 10P			
* CN506	1-560-060-00	PIN, CONNECTOR 2P			
* CN701	1-691-573-11	PIN, CONNECTOR (PC BOARD) 2P			(EXCEPT AEP,SP)
* CN702	1-535-116-00	TERMINAL(US,CND,AUS)			
* CN702	1-691-574-11	PIN, CONNECTOR (PC BOARD) 3P			(AEP,E,SP,PX)
* CN801	1-691-581-11	PIN, CONNECTOR (PC BOARD) 10P			
* CN802	1-691-577-11	PIN, CONNECTOR (PC BOARD) 6P			
CN803	1-506-987-11	PIN, CONNECTOR (PC BOARD) 5P			
		< DIODE >			
D101	8-719-304-37	LED SEL4414E-C(PEAK LEVEL METER)			
D102	8-719-304-37	LED SEL4414E-C(PEAK LEVEL METER)			
D103	8-719-304-37	LED SEL4414E-C(PEAK LEVEL METER)			
D103	8-719-304-37	LED SEL4414E-C(PEAK LEVEL METER)			
D104	8-719-304-37	LED SEL4414E-C(PEAK LEVEL METER)			
D105	8-719-304-37	LED SEL4414E-C(PEAK LEVEL METER)			
D106	8-719-304-32	LED SEL4214S (PEAK LEVEL METER)			
D107	8-719-304-32	LED SEL4214S (PEAK LEVEL METER)			
D201	8-719-304-37	LED SEL4414E-C(PEAK LEVEL METER)			
D202	8-719-304-37	LED SEL4414E-C(PEAK LEVEL METER)			

Ref. No.	Part No.	Description	Remark
D203	8-719-304-37	LED SEL4414E-C(PEAK LEVEL METER)	
D204	8-719-304-37	LED SEL4414E-C(PEAK LEVEL METER)	
D205	8-719-304-37	LED SEL4414E-C(PEAK LEVEL METER)	
D206	8-719-304-32	LED SEL4214S (PEAK LEVEL METER)	
D207	8-719-304-32	LED SEL4214S (PEAK LEVEL METER)	
D501	8-719-987-63	DIODE 1N4148M	
D502	8-719-987-63	DIODE 1N4148M	
D503	8-719-987-63	DIODE 1N4148M	
D504	8-719-987-63	DIODE 1N4148M	
D505	8-719-987-63	DIODE 1N4148M	
D506	8-719-987-63	DIODE 1N4148M	
D507	8-719-987-63	DIODE 1N4148M	
D508	8-719-987-63	DIODE 1N4148M	
D509	8-719-987-63	DIODE 1N4148M	
D510	8-719-987-63	DIODE 1N4148M	
D511	8-719-987-63	DIODE 1N4148M	
D701	8-719-024-99	DIODE 11ES2-NTA2B	
D702	8-719-024-99	DIODE 11ES2-NTA2B	
D703	8-719-024-99	DIODE 11ES2-NTA2B	
D704	8-719-024-99	DIODE 11ES2-NTA2B	
D705	8-719-000-75	DIODE UZL-7L1	
D706	8-719-987-63	DIODE 1N4148M	
D711	8-719-024-99	DIODE 11ES2-NTA2B	
D712	8-719-024-99	DIODE 11ES2-NTA2B	
D713	8-719-987-63	DIODE 1N4148M	
D714	8-719-987-63	DIODE 1N4148M	
D715	8-719-987-63	DIODE 1N4148M	
D716	8-719-933-47	DIODE HZS7B2L	
D717	8-719-987-63	DIODE 1N4148M	
D718	8-719-933-33	DIODE HZS6A1L	
D801	8-719-987-63	DIODE 1N4148M	
D802	8-719-987-63	DIODE 1N4148M	
D803	8-719-987-63	DIODE 1N4148M	
D804	8-719-987-63	DIODE 1N4148M	
D807	8-719-302-46	LED SEL1210S-C-TP3(RECORD)	
D808	8-719-302-46	LED SEL1210S-C-TP3(DUBBING SPEED HIG	
D809	8-719-302-46	LED SEL1210S-C-TP3	(DUBBING SPEED NORMAL)
		< IC >	
IC101	8-759-111-44	IC uPC4570C-1	
IC102	8-759-111-44	IC uPC4570C-1	
IC103	8-759-000-49	IC MC14066BCP	
IC104	8-752-056-08	IC CXA1551P	
IC105	8-752-064-96	IC CXA1579P	
IC106	8-759-634-51	IC M5218AP	
IC107	8-759-079-42	IC uPC1330HA-NA	
IC108	8-759-912-79	IC IR2E02	
IC208	8-759-912-79	IC IR2E02	
IC501	8-759-040-01	IC MC14001BCP	
IC502	8-759-140-11	IC uPD4011BC	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
		< JACK >			
J101	1-770-614-11	JACK, PIN 4P (LINE IN,OUT)			
		< COIL >			
L101	1-410-781-11	INDUCTOR	33mH		
L201	1-410-781-11	INDUCTOR	33mH		
		< FILTER >			
LPF101	1-233-380-11	FILTER, LOW PASS			
LPF201	1-233-380-11	FILTER, LOW PASS			
		< IC LINK>			
⚠P701	1-532-637-00	LINK, IC(1A)(CND,AEP,SP)			
⚠P702	1-532-637-00	LINK, IC(1A)(CND,AEP,SP)			
		< TRANSISTOR >			
Q101	8-729-900-89	TRANSISTOR	DTC144ES		
Q102	8-729-119-78	TRANSISTOR	2SC403SP-51		
Q103	8-729-119-78	TRANSISTOR	2SC403SP-51		
Q201	8-729-900-89	TRANSISTOR	DTC144ES		
Q202	8-729-119-78	TRANSISTOR	2SC403SP-51		
Q203	8-729-119-78	TRANSISTOR	2SC403SP-51		
Q501	8-729-900-65	TRANSISTOR	DTA144ES		
Q503	8-729-900-74	TRANSISTOR	DTC143TS		
Q504	8-729-900-80	TRANSISTOR	DTC114ES		
Q505	8-729-900-89	TRANSISTOR	DTC144ES		
Q506	8-729-119-76	TRANSISTOR	2SA1175-HFE		
Q507	8-729-119-76	TRANSISTOR	2SA1175-HFE		
Q508	8-729-900-65	TRANSISTOR	DTA144ES		
Q509	8-729-119-78	TRANSISTOR	2SC403SP-51		
Q510	8-729-119-78	TRANSISTOR	2SC403SP-51		
Q511	8-729-900-89	TRANSISTOR	DTC144ES		
Q512	8-729-900-89	TRANSISTOR	DTC144ES		
Q515	8-729-142-46	TRANSISTOR	2SC2001-LK		
Q516	8-729-142-46	TRANSISTOR	2SC2001-LK		
Q517	8-729-142-46	TRANSISTOR	2SC2001-LK		
Q518	8-729-900-65	TRANSISTOR	DTA144ES		
Q701	8-729-119-78	TRANSISTOR	2SC403SP-51		
Q702	8-729-119-78	TRANSISTOR	2SC403SP-51		
Q703	8-729-141-83	TRANSISTOR	2SB1094-LK		
Q704	8-729-119-76	TRANSISTOR	2SA1175-HFE		
Q705	8-729-119-76	TRANSISTOR	2SA1175-HFE		
Q706	8-729-209-15	TRANSISTOR	2SD2012		
		< RESISTOR >			
R101	1-247-889-00	CARBON	270K	5%	1/4W
R102	1-247-807-31	CARBON	100	5%	1/4W
R103	1-247-850-11	CARBON	6.2K	5%	1/4W
R104	1-247-881-00	CARBON	120K	5%	1/4W
R105	1-247-889-00	CARBON	270K	5%	1/4W
R106	1-247-807-31	CARBON	100	5%	1/4W
R107	1-249-433-11	CARBON	22K	5%	1/4W
R108	1-247-881-00	CARBON	120K	5%	1/4W
R109	1-247-850-11	CARBON	6.2K	5%	1/4W
R110	1-247-856-00	CARBON	11K	5%	1/4W
R111	1-249-431-11	CARBON	15K	5%	1/4W
R112	1-247-887-00	CARBON	220K	5%	1/4W
R113	1-215-451-00	METAL	18K	1%	1/4W
R114	1-249-433-11	CARBON	22K	5%	1/4W
R115	1-249-441-11	CARBON	100K	5%	1/4W
R116	1-249-429-11	CARBON	10K	5%	1/4W
R117	1-249-423-11	CARBON	3.3K	5%	1/4W
R118	1-249-421-11	CARBON	2.2K	5%	1/4W
R120	1-249-434-11	CARBON	27K	5%	1/4W
R121	1-249-409-11	CARBON	220	5%	1/4W
R122	1-249-425-11	CARBON	4.7K	5%	1/4W
R123	1-249-426-11	CARBON	5.6K	5%	1/4W
R124	1-247-887-00	CARBON	220K	5%	1/4W
R125	1-249-421-11	CARBON	2.2K	5%	1/4W
R128	1-249-441-11	CARBON	100K	5%	1/4W
R129	1-249-421-11	CARBON	2.2K	5%	1/4W
R130	1-249-417-11	CARBON	1K	5%	1/4W
R131	1-249-428-11	CARBON	8.2K	5%	1/4W
R133	1-249-429-11	CARBON	10K	5%	1/4W
R135	1-247-840-00	CARBON	2.4K	5%	1/4W
R136	1-249-441-11	CARBON	100K	5%	1/4W
R137	1-247-883-00	CARBON	150K	5%	1/4W
R138	1-249-433-11	CARBON	22K	5%	1/4W
R141	1-249-428-11	CARBON	8.2K	5%	1/4W
R142	1-249-424-11	CARBON	3.9K	5%	1/4W
R201	1-247-889-00	CARBON	270K	5%	1/4W
R202	1-247-807-31	CARBON	100	5%	1/4W
R203	1-247-850-11	CARBON	6.2K	5%	1/4W
R204	1-247-881-00	CARBON	120K	5%	1/4W
R205	1-247-889-00	CARBON	270K	5%	1/4W
R206	1-247-807-31	CARBON	100	5%	1/4W
R207	1-249-433-11	CARBON	22K	5%	1/4W
R208	1-247-881-00	CARBON	120K	5%	1/4W
R209	1-247-850-11	CARBON	6.2K	5%	1/4W
R210	1-247-856-00	CARBON	11K	5%	1/4W
R211	1-249-431-11	CARBON	15K	5%	1/4W
R212	1-247-887-00	CARBON	220K	5%	1/4W
R213	1-247-807-31	CARBON	100	5%	1/4W
R214	1-249-401-11	CARBON	47	5%	1/4W
R215	1-249-441-11	CARBON	100K	5%	1/4W
R216	1-249-429-11	CARBON	10K	5%	1/4W
R217	1-249-423-11	CARBON	3.3K	5%	1/4W
R218	1-249-421-11	CARBON	2.2K	5%	1/4W
R220	1-249-434-11	CARBON	27K	5%	1/4W
R221	1-249-409-11	CARBON	220	5%	1/4W
R222	1-249-425-11	CARBON	4.7K	5%	1/4W

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MAIN SW METER

Ref. No.	Part No.	Description			Remark
R223	1-249-426-11	CARBON	5.6K	5%	1/4W
R224	1-247-887-00	CARBON	220K	5%	1/4W
R225	1-249-421-11	CARBON	2.2K	5%	1/4W
R228	1-249-441-11	CARBON	100K	5%	1/4W
R229	1-249-421-11	CARBON	2.2K	5%	1/4W
R230	1-249-417-11	CARBON	1K	5%	1/4W
R231	1-249-428-11	CARBON	8.2K	5%	1/4W
R233	1-249-429-11	CARBON	10K	5%	1/4W
R235	1-247-840-00	CARBON	2.4K	5%	1/4W
R236	1-249-441-11	CARBON	100K	5%	1/4W
R237	1-247-883-00	CARBON	150K	5%	1/4W
R238	1-249-433-11	CARBON	22K	5%	1/4W
R241	1-249-428-11	CARBON	8.2K	5%	1/4W
R242	1-249-424-11	CARBON	3.9K	5%	1/4W
R501	1-249-425-11	CARBON	4.7K	5%	1/4W
R502	1-249-425-11	CARBON	4.7K	5%	1/4W
R503	1-249-437-11	CARBON	47K	5%	1/4W
R504	1-249-417-11	CARBON	1K	5%	1/4W
R505	1-249-425-11	CARBON	4.7K	5%	1/4W
R506	1-249-435-11	CARBON	33K	5%	1/4W
R507	1-249-431-11	CARBON	15K	5%	1/4W
R508	1-249-437-11	CARBON	47K	5%	1/4W
R509	1-249-433-11	CARBON	22K	5%	1/4W
R510	1-247-807-31	CARBON	100	5%	1/4W
R511	1-249-437-11	CARBON	47K	5%	1/4W
R512	1-249-393-11	CARBON	10	5%	1/4W
R513	1-249-437-11	CARBON	47K	5%	1/4W
R514	1-249-417-11	CARBON	1K	5%	1/4W
R515	1-215-455-00	METAL	27K	1%	1/4W
R517	1-247-856-00	CARBON	11K	5%	1/4W
R518	1-247-852-11	CARBON	7.5K	5%	1/4W
R519	1-247-856-00	CARBON	11K	5%	1/4W
R520	1-247-852-11	CARBON	7.5K	5%	1/4W
R521	1-249-440-11	CARBON	82K	5%	1/4W
R522	1-249-429-11	CARBON	10K	5%	1/4W
R523	1-247-862-11	CARBON	20K	5%	1/4W
R524	1-249-429-11	CARBON	10K	5%	1/4W
R525	1-249-421-11	CARBON	2.2K	5%	1/4W
R526	1-249-437-11	CARBON	47K	5%	1/4W
⚠R527	1-212-849-00	FUSIBLE	4.7	5%	1/4W F
⚠R528	1-212-849-00	FUSIBLE	4.7	5%	1/4W F
R529	1-249-435-11	CARBON	33K	5%	1/4W
R530	1-249-435-11	CARBON	33K	5%	1/4W
R531	1-249-429-11	CARBON	10K	5%	1/4W
R532	1-249-417-11	CARBON	1K	5%	1/4W
R533	1-249-429-11	CARBON	10K	5%	1/4W
R534	1-249-417-11	CARBON	1K	5%	1/4W
R535	1-249-425-11	CARBON	4.7K	5%	1/4W
R536	1-249-425-11	CARBON	4.7K	5%	1/4W
R701	1-249-421-11	CARBON	2.2K	5%	1/4W
R702	1-249-421-11	CARBON	2.2K	5%	1/4W
R703	1-249-421-11	CARBON	2.2K	5%	1/4W
R704	1-249-421-11	CARBON	2.2K	5%	1/4W
R705	1-249-417-11	CARBON	1K	5%	1/4W
R706	1-249-423-11	CARBON	3.3K	5%	1/4W
R707	1-247-807-31	CARBON	100	5%	1/4W
R709	1-249-424-11	CARBON	3.9K	5%	1/4W
R710	1-249-421-11	CARBON	2.2K	5%	1/4W
R711	1-249-417-11	CARBON	1K	5%	1/4W
R712	1-249-417-11	CARBON	1K	5%	1/4W
R713	1-249-433-11	CARBON	22K	5%	1/4W
R714	1-249-421-11	CARBON	2.2K	5%	1/4W
R715	1-249-421-11	CARBON	2.2K	5%	1/4W
R811	1-249-413-11	CARBON	470	5%	1/4W
R812	1-249-412-11	CARBON	390	5%	1/4W
R813	1-249-413-11	CARBON	470	5%	1/4W
R815	1-249-408-11	CARBON	180	5%	1/4W
R821	1-249-430-11	CARBON	12K	5%	1/4W
R822	1-249-424-11	CARBON	3.9K	5%	1/4W
R823	1-247-838-00	CARBON	2K	5%	1/4W

< VARIABLE RESISTOR >

RV101	1-241-630-11	RES, ADJ, CARBON 10K (PLAYBACK LEVEL(L-CH))(DECK A)
RV102	1-241-630-11	RES, ADJ, CARBON 10K (PLAYBACK LEVEL(L-CH))(DECK B)
RV103	1-241-630-11	RES, ADJ, CARBON 10K (REC LEVEL(L-CH))
RV105	1-241-768-11	RES, ADJ, CARBON 220K (REC BIAS(L-CH))
RV107	1-223-850-11	RES, VAR, CARBON 20K/20K(REC LEVEL)
RV201	1-241-630-11	RES, ADJ, CARBON 10K (PLAYBACK LEVEL(R-CH))(DECK A)
RV202	1-241-630-11	RES, ADJ, CARBON 10K (PLAYBACK LEVEL(R-CH))(DECK B)
RV203	1-241-630-11	RES, ADJ, CARBON 10K (REC LEVEL(R-CH))
RV205	1-241-768-11	RES, ADJ, CARBON 220K (REC BIAS(R-CH))
RV501	1-241-762-11	RES, ADJ, CARBON 2.2K (TAPE SPEED(HIGH))(DECK A)
RV502	1-241-762-11	RES, ADJ, CARBON 2.2K (TAPE SPEED(NORMAL))(DECK A)
RV503	1-241-762-11	RES, ADJ, CARBON 2.2K (TAPE SPEED(HIGH))(DECK B)
RV504	1-241-762-11	RES, ADJ, CARBON 2.2K (TAPE SPEED(NORMAL))(DECK B)

< SWITCH >

S701	1-762-580-11	SWITCH, PUSH (1 KEY)(POWER) (US,CND,E,AUS,PX)
⚠S702	1-762-581-11	SWITCH, AC POWER PUSH (1 KEY)(POWER) (AEP,SP)
⚠S703	1-692-155-11	SELECTOR POWER VOLTAGE (VOLTAGE SELECTOR) (E,PX)
S801	1-762-251-11	SWITCH, SLIDE(DOLBY NR)
S802	1-762-251-11	SWITCH, SLIDE(DECK A TAPE TYPE)
S803	1-762-747-11	SWITCH, PUSH (DUBBING SPEED)
S804	1-762-748-11	SWITCH, SLIDE(DECK B TAPE TYPE)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
		< TRANSFORMER >	
T501	1-427-780-11	TRANSFORMER, BIAS OSCILLATION	
**********			
		MISCELLANEOUS	
		**********	
⚠14	1-569-007-11	ADAPTOR, CONVERSION 2P (E)	
68	1-251-440-11	COUNTER, TAPE	
⚠CNP1	1-558-945-21	CORD, POWER (POLAR.SPT-1)(US,CND)	
⚠CNP1	1-777-107-11	CORD, POWER (AEP,SP)	
⚠CNP1	1-777-217-11	CORD, POWER (E,PX)	
⚠CNP1	1-777-218-11	CORD, POWER (AUS)	
HE101	1-543-673-11	ERASE HEAD (DECK B)	
HP101	1-543-672-11	PLAYBACK HEAD (DECK A)	
HRP101	1-543-672-11	PLAYBACK/RECORD HEAD (DECK B)	
M901	1-698-845-11	REEL/CAPSTAN MOTOR (DECK A)	
M902	1-698-845-11	REEL/CAPSTAN MOTOR (DECK B)	
⚠S703	1-692-155-11	SELECTOR,POWER VOLTAGE (VOLTAGE SELECTOR) (E,PX)	
S901	1-692-434-11	LEAF SWITCH (MOTOR) (DECK A)	
S902	1-692-434-11	LEAF SWITCH (PLAY) (DECK A)	
S903	1-692-434-11	LEAF SWITCH (MOTOR) (DECK B)	
S904	1-692-434-11	LEAF SWITCH (PLAY) (DECK B)	
S905	1-692-434-11	LEAF SWITCH (REC) (DECK B)	
⚠T701	1-429-716-11	TRANSFORMER POWER (US,CND)	
⚠T701	1-429-717-11	TRANSFORMER POWER (AEP,SP)	
⚠T701	1-429-718-11	TRANSFORMER POWER (E,PX)	
⚠T701	1-429-827-11	TRANSFORMER POWER (AUS)	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-558-271-11	CORD, CONNECTION	
	3-856-686-11	MANUAL, INSTRUCTION (US,CND,AUS,SP) (ENGLISH)	
	3-856-686-21	MANUAL, INSTRUCTION (CND) (FRENCH)	
	3-856-686-31	MANUAL, INSTRUCTION (AEP,E,PX) (ENGLISH,FRENCH,SPANISH,CHINESE)	
	3-856-686-41	MANUAL, INSTRUCTION (AEP,SP) (GERMAN,DUTCH,SWEDISH,ITALIAN)	
*	3-936-921-01	CUSHION	
*	3-936-940-01	INDIVIDUAL CARTON (AEP,SP)	
*	3-936-941-01	INDIVIDUAL CARTON (EXCEPT AEP,SP)	
**********			

Ref. No.	Part No.	Description	Remark
		**********	
		HARDWARE LIST	
		**********	
#1	7-682-548-04	SCREW +BVTT 3X8 (S)	
#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
#3	7-621-255-45	SCREW +P 2X6 (E)	
#4	7-628-254-05	SCREW +PS 2.6X5	
#5	7-685-861-01	SCREW +BVTT 2.6X5 (S)	
#6	7-685-104-19	SCREW +P 2X6 TYPE2 NON SLIT	
#7	7-621-255-25	SCREW +PTT 2X4 (S)	
#8	7-685-782-01	SCREW +PTT 2X5 (S)	

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TC-WE305

SONY

SERVICE MANUAL

Ver 1.2 2003.12

US Model
Canadian Model
AEP Model
E Model
Australian Model
PX Model

SUPPLEMENT - 1

File this Supplement with the Service Manual.

Subject : SUFFIX CHANGE OF THE MAIN, SW AND METER BOARD

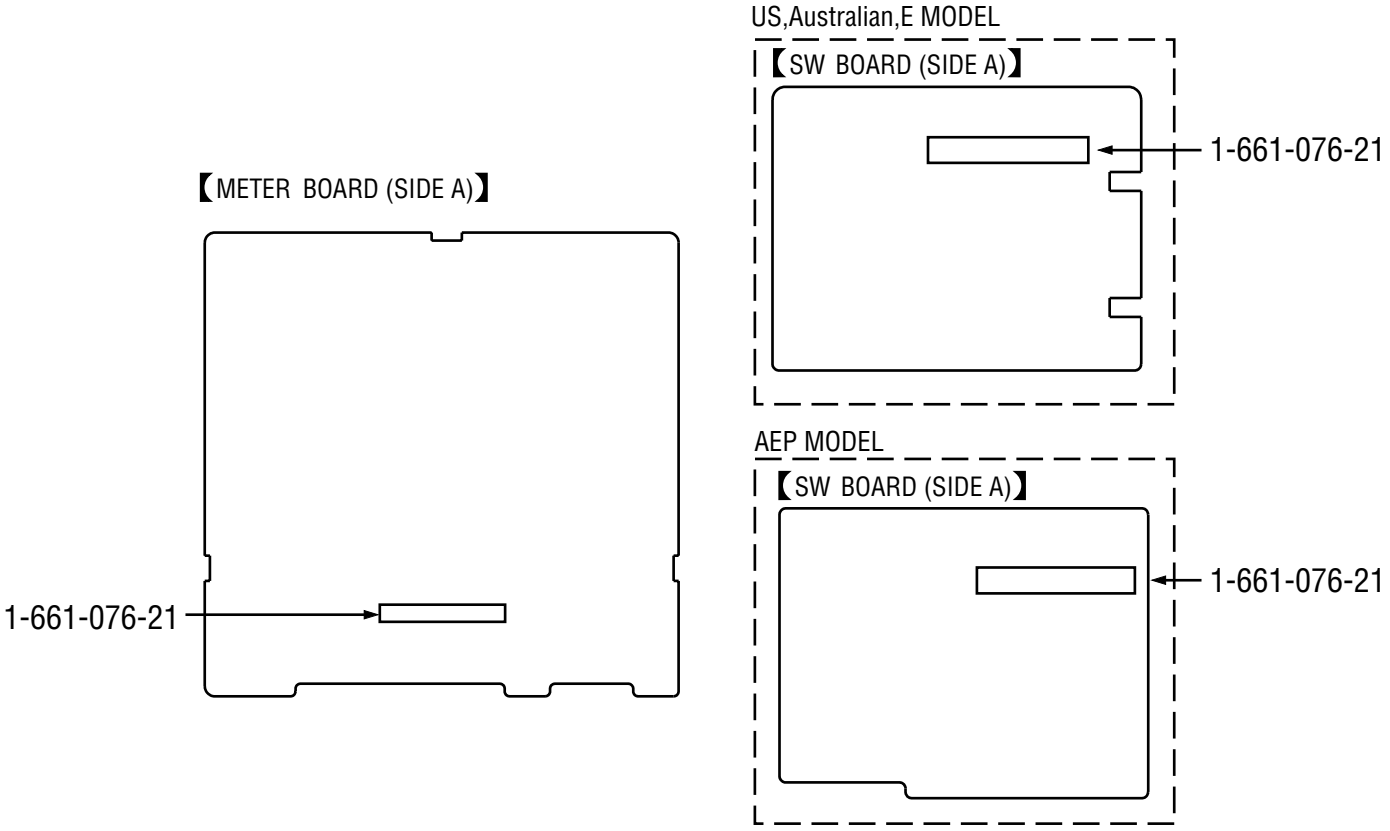
(ECN-TCA00478)

9-960-691-81

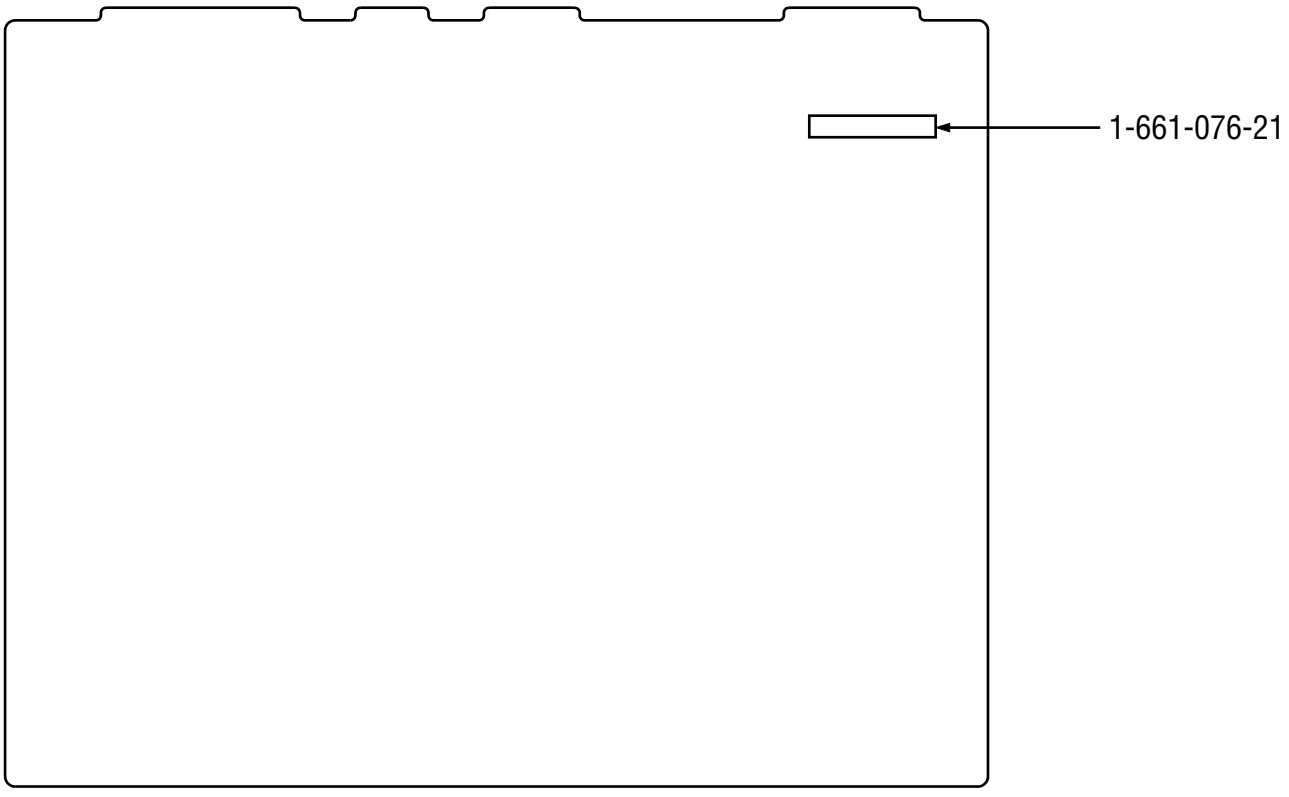
● **CHANGE OF MAIN BOARD**

The main, SW and meter boards of US, AEP, Australian and E model were changed (CND, SP and PX model are not changed).
Printed wiring board and schematic diagram of new type, and changed parts list are described in this Supplement-1.
Refer to original service manual (9-960-691-13) previously issued for the other information.

NEW TYPE IDENTIFICATION
(US, AEP, Australian, E model)

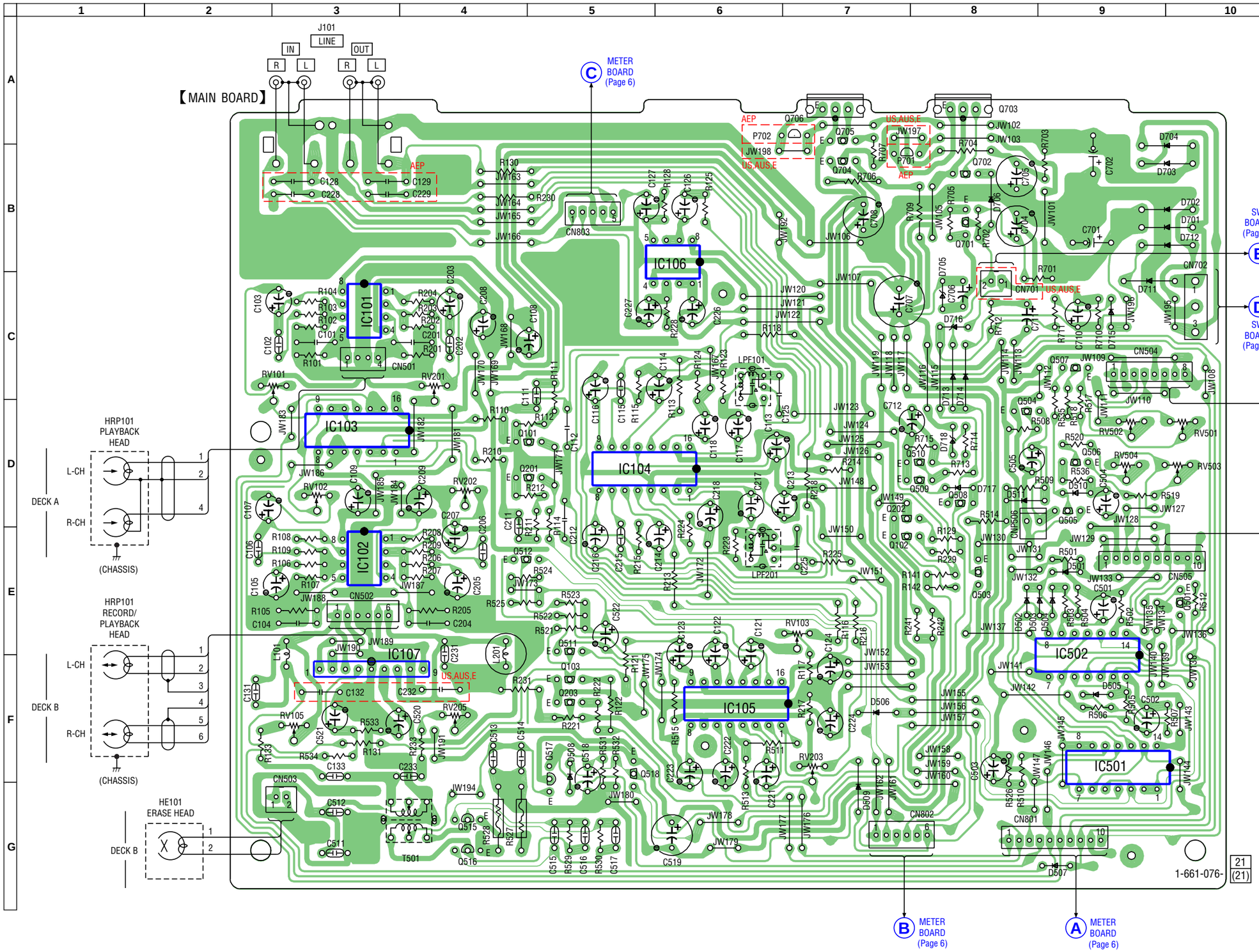


【MAIN BOARD (SIDE A)】



DIAGRAMS

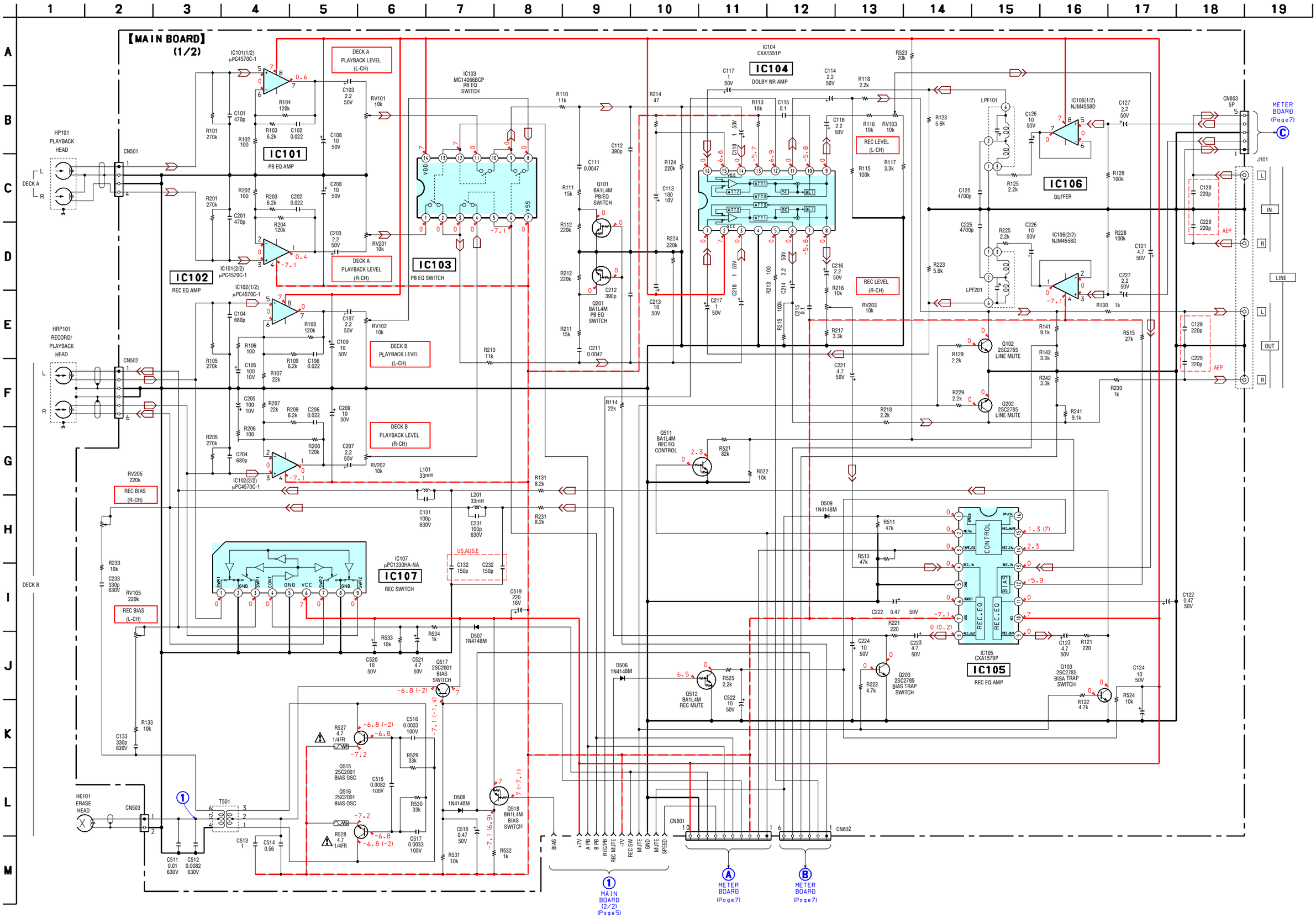
PRINTED WIRING BOARDS –MAIN Section–



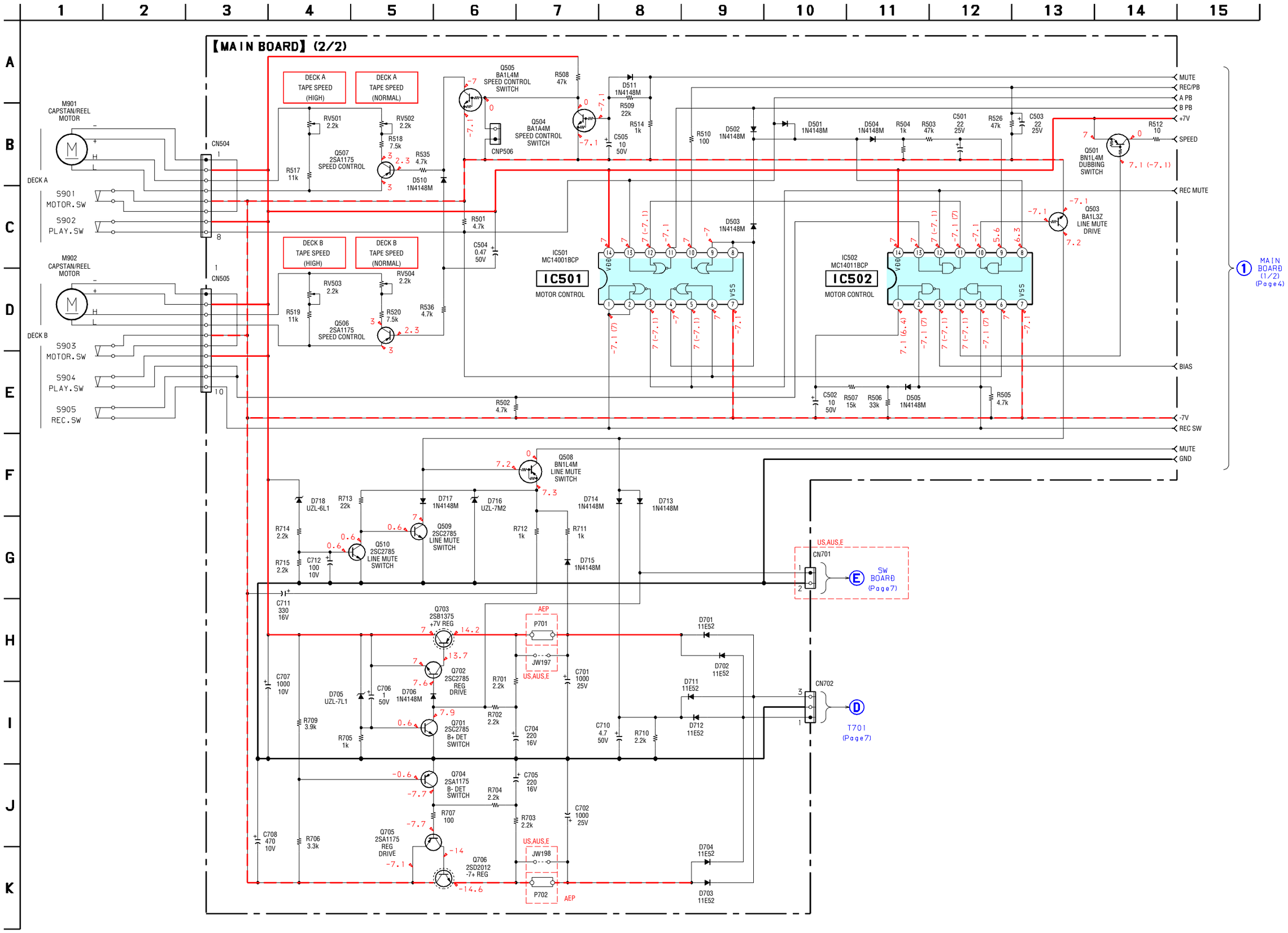
- **Semiconductor Location**

Ref. No.	Location
D501	E-9
D502	E-8
D503	E-9
D504	E-9
D505	F-9
D506	F-7
D507	G-9
D508	D-8
D509	G-7
D510	D-9
D511	D-8
D701	B-10
D702	B-10
D703	B-10
D704	B-10
D705	C-8
D706	B-8
D711	C-9
D712	B-10
D713	C-8
D714	C-8
D715	C-9
D716	C-8
D717	D-8
D718	D-8
IC101	C-3
IC102	E-3
IC103	D-3
IC104	D-5
IC105	F-5
IC106	B-6
IC107	F-3
IC501	F-9
IC502	E-9
Q101	D-5
Q102	E-7
Q103	F-5
Q201	D-5
Q202	D-7
Q203	F-5
Q501	E10
Q503	E-8
Q504	D-8
Q505	D-9
Q506	D-9
Q507	C-9
Q508	D-8
Q509	D-8
Q510	D-8
Q511	E-5
Q512	G-4
Q515	G-4
Q516	G-4
Q517	F-5
Q518	F-5
Q701	B-8
Q702	B-8
Q703	A-8
Q704	B-7
Q705	A-7
Q706	A-7

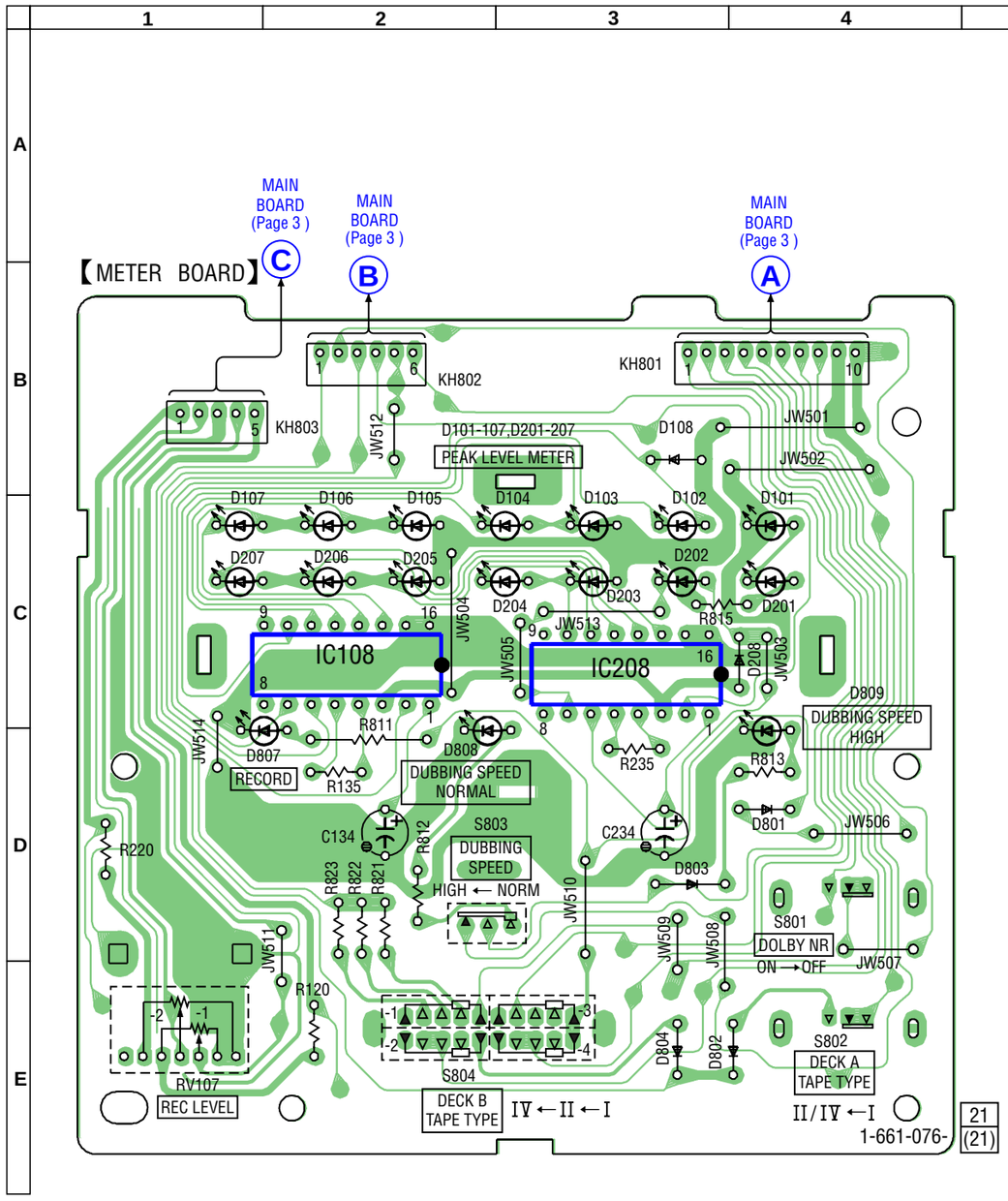
SCHEMATIC DIAGRAM – MAIN SECTION (1/2) –

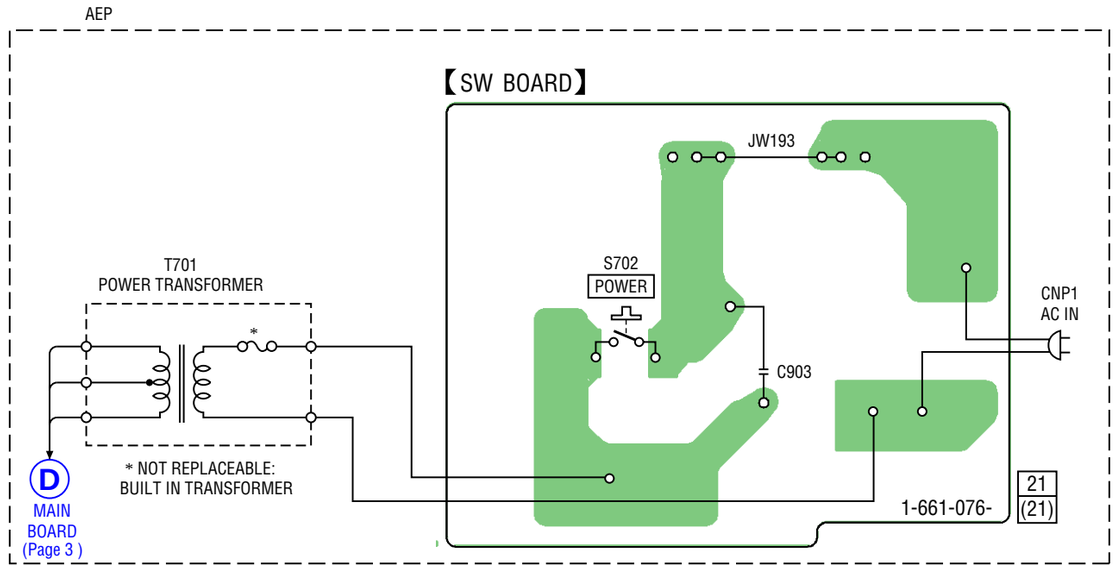


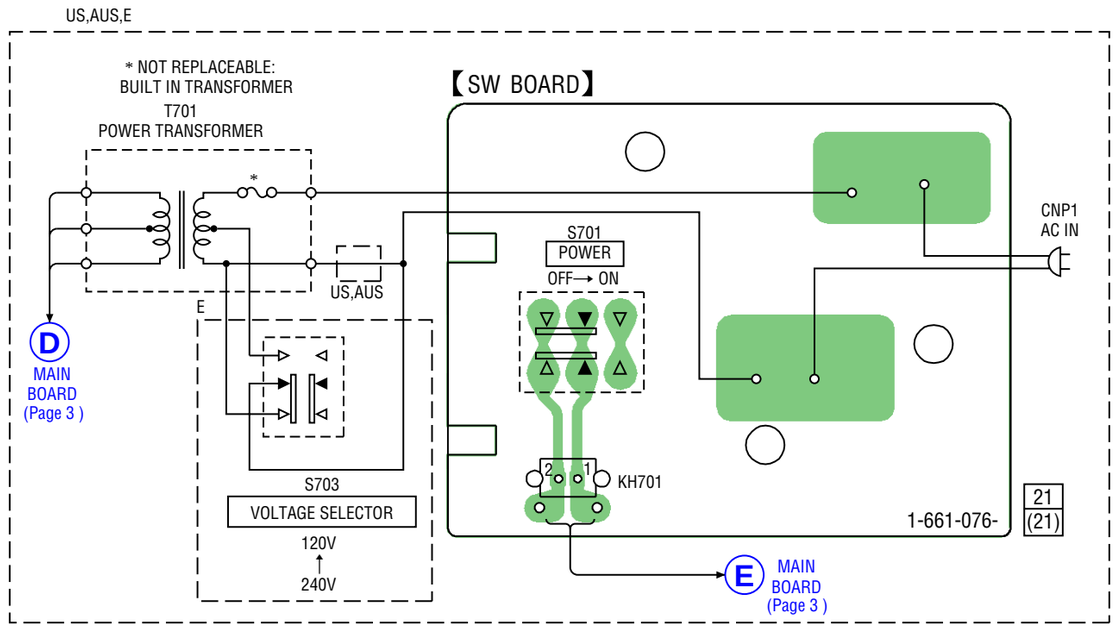
SCHEMATIC DIAGRAM – MAIN SECTION (2/2) –



PRINTED WIRING BOARDS –SW, METER Section–



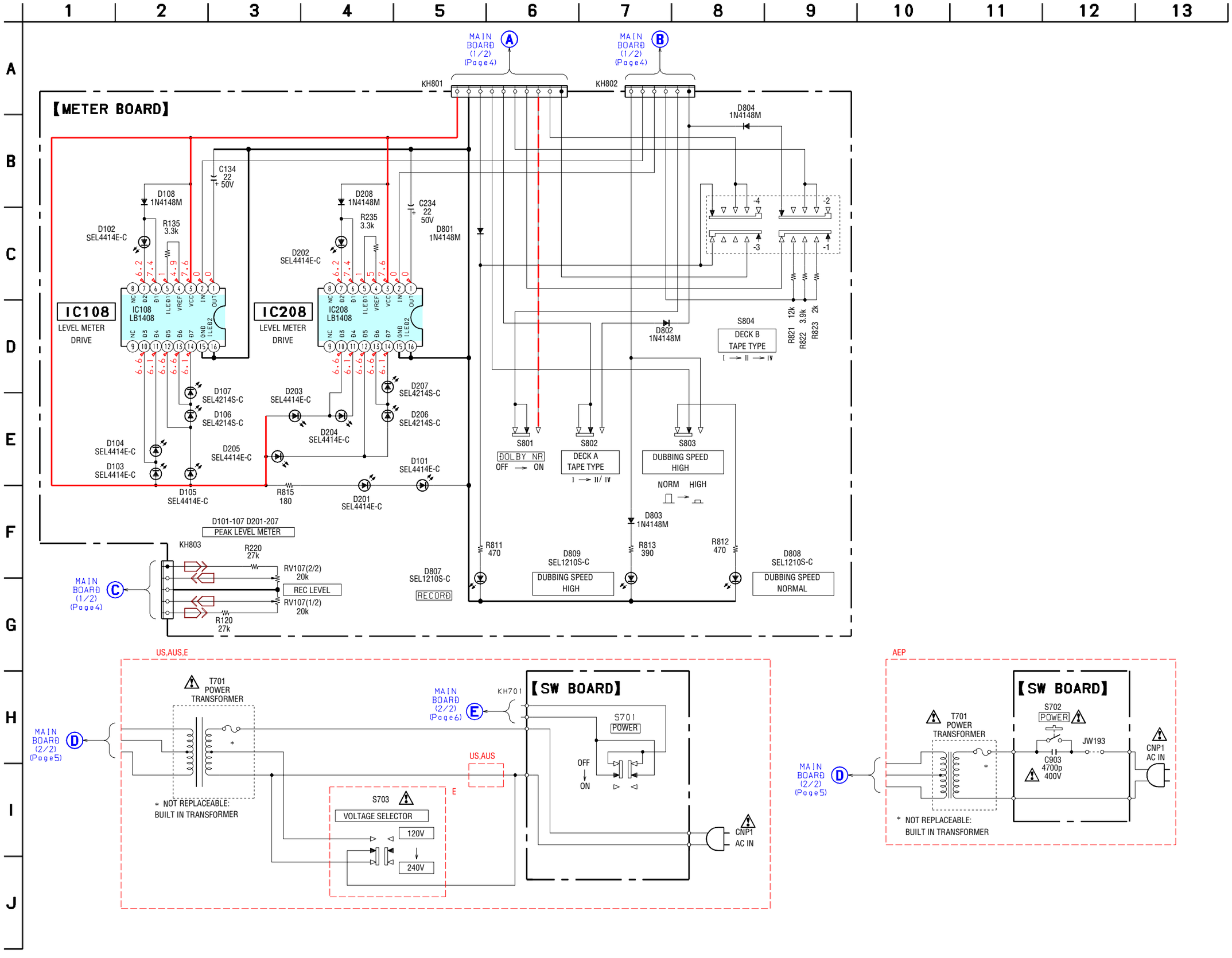




- **Semiconductor Location**

Ref. No.	Location
D101	C-4
D102	C-3
D103	C-3
D104	C-3
D105	C-2
D106	C-2
D107	C-1
D108	B-3
D201	C-4
D202	C-3
D203	C-3
D204	C-3
D205	C-2
D206	C-2
D207	C-1
D208	C-4
D801	D-4
D802	E-4
D803	D-3
D804	E-3
D807	D-2
D808	D-2
D809	C-4
IC108	C-2
IC208	C-3

SCHEMATIC DIAGRAM –SW, METER Section–



For schematic diagrams.

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specifed.
- % : indicates tolerance.
- △ : internal component.
- : fusible resistor.
- : panel designation.

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- : B+ Line.
- : B– Line.
- : adjustment for repair.
- Voltages are dc with respect to ground under no-signal conditions.
  no mark : PLAY
  ( ) : REC
- Voltages are taken with a VOM (Input impedance 10 MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production toler ances.
- Circled numbers refer to waveforms.
- Signal path.
  : PB (DECK A)
  : PB (DECK B)
  : REC (DECK B)
- Abbreviation
  AUS : Australian

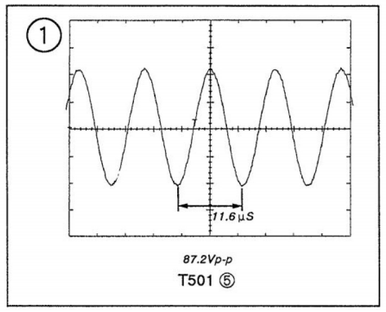
Note on Printed Wiring Boards:

Note:

- ○—— : parts extracted from the component side.
- △ : internal component.
- : Pattern from the side which enables seeing.

- Abbreviation
  AUS : Australian

● Waveforms



ELECTRICAL PARTS LIST

MAIN | SW | METER

NOTE :
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE :Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ , for example :
  uA.... : µ A.... , uPA.... : µ PA....
  uPB.... : µ PB.... , uPC.... : µ PC....
  uPD.... : µ PD....
- CAPACITORS
  uF : µ F
- COILS
  uH : µ H
- Abbreviation
  AUS : Australian

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-2007-564-A	MAIN BOARD, COMPLETE (US,AUS,E)			
*	A-2007-589-A	MAIN BOARD, COMPLETE (AEP)			
		**********			
		SW BOARD			
		********			
		METER BOARD			
		**********			
*	1-535-688-11	TERMINAL (US,AUS,E)			
		<CAPACITOR>			
C101	1-162-290-31	CERAMIC	470PF	10%	50V
C102	1-136-157-00	MYLAR	0.022uF	5%	50V
C103	1-126-961-11	ELECT	2.2uF	20%	50V
C104	1-162-292-31	CERAMIC	680PF	10%	50V
C105	1-104-665-11	ELECT	100uF	20%	10V
C106	1-136-157-00	MYLAR	0.022uF	5%	50V
C107	1-126-961-11	ELECT	2.2uF	20%	50V
C108	1-126-964-11	ELECT	10uF	20%	50V
C109	1-126-964-11	ELECT	10uF	20%	50V
C111	1-130-479-00	MYLAR	0.0047uF	5%	50V
C112	1-162-289-31	CERAMIC	390PF	10%	50V
C113	1-104-665-11	ELECT	100uF	20%	10V
C114	1-126-961-11	ELECT	2.2uF	20%	50V
C115	1-136-165-00	MYLAR	0.1uF	5%	50V
C116	1-126-961-11	ELECT	2.2uF	20%	50V
C117	1-126-960-11	ELECT	1uF	20%	50V
C118	1-126-960-11	ELECT	1uF	20%	50V
C121	1-126-963-11	ELECT	4.7uF	20%	50V
C122	1-124-902-00	ELECT	0.47uF	20%	50V
C123	1-126-963-11	ELECT	4.7uF	20%	50V
C124	1-126-964-11	ELECT	10uF	20%	50V
C125	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C126	1-126-964-11	ELECT	10uF	20%	50V
C127	1-126-961-11	ELECT	2.2uF	20%	50V
C128	1-162-286-31	CERAMIC	220PF	10%	50V (AEP)
C129	1-162-286-31	CERAMIC	220PF	10%	50V (AEP)
C131	1-136-433-11	FILM	100PF	5%	630V
C132	1-162-284-31	CERAMIC	150PF	10%	50V (US,AUS,E)
C133	1-136-439-11	FILM	330PF	5%	630V
C134	1-126-233-11	ELECT	22uF	20%	50V
C201	1-162-290-31	CERAMIC	470PF	10%	50V
C202	1-136-157-00	MYLAR	0.022uF	5%	50V
C203	1-126-961-11	ELECT	2.2uF	20%	50V
C204	1-162-292-31	CERAMIC	680PF	10%	50V
C205	1-104-665-11	ELECT	100uF	20%	10V
C206	1-136-157-00	MYLAR	0.022uF	5%	50V
C207	1-126-961-11	ELECT	2.2uF	20%	50V
C208	1-126-964-11	ELECT	10uF	20%	50V
C209	1-126-964-11	ELECT	10uF	20%	50V
C211	1-130-479-00	MYLAR	0.0047uF	5%	50V
C212	1-162-289-31	CERAMIC	390PF	10%	50V
C213	1-126-964-11	ELECT	10uF	20%	50V
C214	1-126-961-11	ELECT	2.2uF	20%	50V
C215	1-136-165-00	MYLAR	0.1uF	5%	50V
C216	1-126-961-11	ELECT	2.2uF	20%	50V
C217	1-126-960-11	ELECT	1uF	20%	50V
C218	1-126-960-11	ELECT	1uF	20%	50V
C221	1-126-963-11	ELECT	4.7uF	20%	50V
C222	1-124-902-00	ELECT	0.47uF	20%	50V
C223	1-126-963-11	ELECT	4.7uF	20%	50V
C224	1-126-964-11	ELECT	10uF	20%	50V
C225	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C226	1-126-964-11	ELECT	10uF	20%	50V
C227	1-126-961-11	ELECT	2.2uF	20%	50V
C228	1-162-286-31	CERAMIC	220PF	10%	50V (AEP)
C229	1-162-286-31	CERAMIC	220PF	10%	50V (AEP)
C231	1-136-433-11	FILM	100PF	5%	630V
C232	1-162-284-31	CERAMIC	150PF	10%	50V (US,AUS,E)
C233	1-136-439-11	FILM	330PF	5%	630V
C234	1-126-233-11	ELECT	22uF	20%	50V
C501	1-126-233-11	ELECT	22uF	20%	50V
C502	1-126-964-11	ELECT	10uF	20%	50V
C503	1-126-233-11	ELECT	22uF	20%	50V
C504	1-124-902-00	ELECT	0.47uF	20%	50V
C505	1-126-964-11	ELECT	10uF	20%	50V
C511	1-136-601-11	FILM	0.01uF	5%	630V
C512	1-136-562-11	FILM	0.0082uF	5%	630V
C513	1-136-177-00	MYLAR	1uF	5%	50V
C514	1-136-174-00	MYLAR	0.56uF	5%	50V
C515	1-106-365-00	MYLAR	0.0082uF	5%	100V
C516	1-106-355-12	MYLAR	3300PF	5%	200V
C517	1-106-355-12	MYLAR	3300PF	5%	200V
C518	1-124-902-00	ELECT	0.47uF	20%	50V
C519	1-104-666-11	ELECT	220uF	20%	16V

MAIN SW METER

Ref. No.	Part No.	Description			Remark
C520	1-126-964-11	ELECT	10uF	20%	50V
C521	1-126-963-11	ELECT	4.7uF	20%	50V
C522	1-126-964-11	ELECT	10uF	20%	50V
C701	1-126-942-61	ELECT	1000uF	20%	25V
C702	1-126-942-61	ELECT	1000uF	20%	25V
C704	1-104-666-11	ELECT	220uF	20%	16V
C705	1-104-666-11	ELECT	220uF	20%	16V
C706	1-126-960-11	ELECT	1uF	20%	50V
C707	1-126-767-11	ELECT	1000uF	20%	10V
C708	1-126-935-11	ELECT	470uF	20%	10V
C710	1-126-963-11	ELECT	4.7uF	20%	50V
C711	1-126-940-11	ELECT	330uF	20%	16V
C712	1-104-665-11	ELECT	100uF	20%	10V
⚠C903	1-113-912-11	CERAMIC	0.0047uF	20%	400V (AEP)
		<CONNECTOR>			
CN501	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P			
* CN502	1-691-577-11	PIN, CONNECTOR (PC BOARD) 6P			
* CN503	1-691-573-11	PIN, CONNECTOR (PC BOARD) 2P			
* CN504	1-691-579-11	PIN, CONNECTOR (PC BOARD) 8P			
* CN505	1-691-581-11	PIN, CONNECTOR (PC BOARD) 10P			
* CN701	1-691-573-11	PIN, CONNECTOR (PC BOARD) 2P			
* CN702	1-535-116-21	TERMINAL (US,AUS,E)			
* CN702	1-691-574-11	PIN, CONNECTOR (PC BOARD) 3P (AEP)			
* CN801	1-691-581-11	PIN, CONNECTOR (PC BOARD) 10P			
* CN802	1-691-577-11	PIN, CONNECTOR (PC BOARD) 6P			
CN803	1-506-987-11	PIN, CONNECTOR (PC BOARD) 5P			
* CNP506	1-560-060-00	PIN, CONNECTOR 2P			
		<DIODE>			
D101	8-719-304-37	DIODE	SEL4414E-C-TP (PEAK LEVEL METER)		
D102	8-719-304-37	DIODE	SEL4414E-C-TP (PEAK LEVEL METER)		
D103	8-719-304-37	DIODE	SEL4414E-C-TP (PEAK LEVEL METER)		
D104	8-719-304-37	DIODE	SEL4414E-C-TP (PEAK LEVEL METER)		
D105	8-719-304-37	DIODE	SEL4414E-C-TP (PEAK LEVEL METER)		
D106	8-719-304-32	DIODE	SEL4214S-C-TP (PEAK LEVEL METER)		
D107	8-719-304-32	DIODE	SEL4214S-C-TP (PEAK LEVEL METER)		
D108	8-719-991-33	DIODE	1SS133T-72		
D201	8-719-304-37	DIODE	SEL4414E-C-TP (PEAK LEVEL METER)		
D202	8-719-304-37	DIODE	SEL4414E-C-TP (PEAK LEVEL METER)		
D203	8-719-304-37	DIODE	SEL4414E-C-TP (PEAK LEVEL METER)		
D204	8-719-304-37	DIODE	SEL4414E-C-TP (PEAK LEVEL METER)		
D205	8-719-304-37	DIODE	SEL4414E-C-TP (PEAK LEVEL METER)		
D206	8-719-304-32	DIODE	SEL4214S-C-TP (PEAK LEVEL METER)		
D207	8-719-304-32	DIODE	SEL4214S-C-TP (PEAK LEVEL METER)		
D208	8-719-991-33	DIODE	1SS133T-72		
D501	8-719-991-33	DIODE	1SS133T-72		
D502	8-719-991-33	DIODE	1SS133T-72		
D503	8-719-991-33	DIODE	1SS133T-72		
D504	8-719-991-33	DIODE	1SS133T-72		
D505	8-719-991-33	DIODE	1SS133T-72		
D506	8-719-991-33	DIODE	1SS133T-72		
D507	8-719-991-33	DIODE	1SS133T-72		
D508	8-719-991-33	DIODE	1SS133T-72		
D509	8-719-991-33	DIODE	1SS133T-72		
D510	8-719-991-33	DIODE	1SS133T-72		
D511	8-719-991-33	DIODE	1SS133T-72		
D701	8-719-024-99	DIODE	11ES2-NTA2B		
D702	8-719-024-99	DIODE	11ES2-NTA2B		
D703	8-719-024-99	DIODE	11ES2-NTA2B		
D704	8-719-024-99	DIODE	11ES2-NTA2B		
D705	8-719-933-43	DIODE	HZS7A1LTA		
D706	8-719-991-33	DIODE	1SS133T-72		
D711	8-719-024-99	DIODE	11ES2-NTA2B		
D712	8-719-024-99	DIODE	11ES2-NTA2B		
D713	8-719-991-33	DIODE	1SS133T-72		
D714	8-719-991-33	DIODE	1SS133T-72		
D715	8-719-991-33	DIODE	1SS133T-72		
D716	8-719-933-47	DIODE	HZS7B2LTA		
D717	8-719-991-33	DIODE	1SS133T-72		
D718	8-719-933-33	DIODE	HZS6A1LTA		
D801	8-719-991-33	DIODE	1SS133T-72		
D802	8-719-991-33	DIODE	1SS133T-72		
D803	8-719-991-33	DIODE	1SS133T-72		
D804	8-719-991-33	DIODE	1SS133T-72		
D807	8-719-302-46	DIODE	SEL1210S-C-TP3 (RECORD)		
D808	8-719-302-46	DIODE	SEL1210S-C-TP3 (DUBBING SPEED NORMAL)		
D809	8-719-302-46	DIODE	SEL1210S-C-TP3 (DUBBING SPEED HIGH)		
		<IC>			
IC101	8-759-111-44	IC	uPC4570C-1		
IC102	8-759-111-44	IC	uPC4570C-1		
IC103	8-759-000-49	IC	MC14066BCP		
IC104	8-752-056-08	IC	CXA1551P		
IC105	8-752-055-62	IC	CXA1579P		
IC106	8-759-634-51	IC	NJM4558D		
IC107	8-759-079-42	IC	uPC1330HA-NA		
IC108	6-703-632-01	IC	LB1408		
IC208	6-703-632-01	IC	LB1408		
IC501	8-759-040-01	IC	MC14001BCP		
IC502	8-759-140-11	IC	MC14011BCP		
		<JACK>			
J101	1-770-614-11	JACK, PIN 4P (LINE IN/OUT)			
		<CABLE HOLDER>			
* KH701	1-573-287-11	HOLDER, CABLE 2P			
		<COIL>			
L101	1-410-781-11	INDUCTOR	33mH		
L201	1-410-781-11	INDUCTOR	33mH		
		<FILTER>			
LPF101	1-233-380-11	FILTER, LOW PASS			
LPF201	1-233-380-11	FILTER, LOW PASS			
		<IC LINK>			
⚠P701	1-532-984-11	IC LINK	2A	50V (AEP)	
⚠P702	1-532-984-11	IC LINK	2A	50V (AEP)	
		<TRANSISTOR>			
Q101	8-729-900-89	TRANSISTOR	BA1L4M-TP		
Q102	8-729-119-78	TRANSISTOR	2SC2785TP-HFE		
Q103	8-729-119-78	TRANSISTOR	2SC2785TP-HFE		
Q201	8-729-900-89	TRANSISTOR	BA1L4M-TP		

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

MAIN **SW** **METER**

Ref. No.	Part No.	Description				Remark
Q202	8-729-119-78	TRANSISTOR	2SC2785TP-HFE			
Q203	8-729-119-78	TRANSISTOR	2SC2785TP-HFE			
Q501	8-729-900-65	TRANSISTOR	BN1L4M-TP			
Q503	8-729-029-94	TRANSISTOR	BA1L3Z-TP			
Q504	8-729-116-02	TRANSISTOR	BA1A4M-TP			
Q505	8-729-900-89	TRANSISTOR	BA1L4M-TP			
Q506	8-729-119-76	TRANSISTOR	2SA1175TP-HFE			
Q507	8-729-119-76	TRANSISTOR	2SA1175TP-HFE			
Q508	8-729-900-65	TRANSISTOR	BN1L4M-TP			
Q509	8-729-119-78	TRANSISTOR	2SC2785TP-HFE			
Q510	8-729-119-78	TRANSISTOR	2SC2785TP-HFE			
Q511	8-729-900-89	TRANSISTOR	BA1L4M-TP			
Q512	8-729-900-89	TRANSISTOR	BA1L4M-TP			
Q515	8-729-142-46	TRANSISTOR	2SC2001TP-LK			
Q516	8-729-142-46	TRANSISTOR	2SC2001TP-LK			
Q517	8-729-142-46	TRANSISTOR	2SC2001TP-LK			
Q518	8-729-900-65	TRANSISTOR	BN1L4M-TP			
Q701	8-729-119-78	TRANSISTOR	2SC2785TP-HFE			
Q702	8-729-119-78	TRANSISTOR	2SC2785TP-HFE			
Q703	8-729-209-60	TRANSISTOR	2SB1375			
Q704	8-729-119-76	TRANSISTOR	2SA1175TP-HFE			
Q705	8-729-119-76	TRANSISTOR	2SA1175TP-HFE			
Q706	8-729-209-15	TRANSISTOR	2SD2012			

<RESISTOR>

R101	1-247-889-00	CARBON	270K	5%	1/4W	
R102	1-247-807-31	CARBON	100	5%	1/4W	
R103	1-247-850-11	CARBON	6.2K	5%	1/4W	
R104	1-247-881-00	CARBON	120K	5%	1/4W	
R105	1-247-889-00	CARBON	270K	5%	1/4W	
R106	1-247-807-31	CARBON	100	5%	1/4W	
R107	1-249-433-11	CARBON	22K	5%	1/4W	
R108	1-247-881-00	CARBON	120K	5%	1/4W	
R109	1-247-850-11	CARBON	6.2K	5%	1/4W	
R110	1-247-856-00	CARBON	11K	5%	1/4W	
R111	1-249-431-11	CARBON	15K	5%	1/4W	
R112	1-247-887-00	CARBON	220K	5%	1/4W	
R113	1-215-451-00	METAL	18K	1%	1/4W	
R114	1-249-433-11	CARBON	22K	5%	1/4W	
R115	1-249-441-11	CARBON	100K	5%	1/4W	
R116	1-249-429-11	CARBON	10K	5%	1/4W	
R117	1-247-843-11	CARBON	3.3K	5%	1/4W	
R118	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R120	1-249-434-11	CARBON	27K	5%	1/4W	
R121	1-249-409-11	CARBON	220	5%	1/4W	F
R122	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R123	1-249-426-11	CARBON	5.6K	5%	1/4W	
R124	1-247-887-00	CARBON	220K	5%	1/4W	
R125	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R128	1-249-441-11	CARBON	100K	5%	1/4W	
R129	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R130	1-249-417-11	CARBON	1K	5%	1/4W	F
R131	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R133	1-249-429-11	CARBON	10K	5%	1/4W	
R135	1-247-843-11	CARBON	3.3K	5%	1/4W	
R141	1-247-854-11	CARBON	9.1K	5%	1/4W	
R142	1-247-843-11	CARBON	3.3K	5%	1/4W	
R201	1-247-889-00	CARBON	270K	5%	1/4W	
R202	1-247-807-31	CARBON	100	5%	1/4W	
R203	1-247-850-11	CARBON	6.2K	5%	1/4W	
R204	1-247-881-00	CARBON	120K	5%	1/4W	
R205	1-247-889-00	CARBON	270K	5%	1/4W	
R206	1-247-807-31	CARBON	100	5%	1/4W	
R207	1-249-433-11	CARBON	22K	5%	1/4W	
R208	1-247-881-00	CARBON	120K	5%	1/4W	
R209	1-247-850-11	CARBON	6.2K	5%	1/4W	
R210	1-247-856-00	CARBON	11K	5%	1/4W	
R211	1-249-431-11	CARBON	15K	5%	1/4W	
R212	1-247-887-00	CARBON	220K	5%	1/4W	
R213	1-247-807-31	CARBON	100	5%	1/4W	
R214	1-249-401-11	CARBON	47	5%	1/4W	F
R215	1-249-441-11	CARBON	100K	5%	1/4W	
R216	1-249-429-11	CARBON	10K	5%	1/4W	
R217	1-247-843-11	CARBON	3.3K	5%	1/4W	
R218	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R220	1-249-434-11	CARBON	27K	5%	1/4W	
R221	1-249-409-11	CARBON	220	5%	1/4W	F
R222	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R223	1-249-426-11	CARBON	5.6K	5%	1/4W	
R224	1-247-887-00	CARBON	220K	5%	1/4W	
R225	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R228	1-249-441-11	CARBON	100K	5%	1/4W	
R229	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R230	1-249-417-11	CARBON	1K	5%	1/4W	F
R231	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R233	1-249-429-11	CARBON	10K	5%	1/4W	
R235	1-247-843-11	CARBON	3.3K	5%	1/4W	
R241	1-247-854-11	CARBON	9.1K	5%	1/4W	
R242	1-247-843-11	CARBON	3.3K	5%	1/4W	
R501	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R502	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R503	1-249-437-11	CARBON	47K	5%	1/4W	
R504	1-249-417-11	CARBON	1K	5%	1/4W	F
R505	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R506	1-249-435-11	CARBON	33K	5%	1/4W	
R507	1-249-431-11	CARBON	15K	5%	1/4W	
R508	1-249-437-11	CARBON	47K	5%	1/4W	
R509	1-249-433-11	CARBON	22K	5%	1/4W	
R510	1-247-807-31	CARBON	100	5%	1/4W	
R511	1-249-437-11	CARBON	47K	5%	1/4W	
R512	1-249-393-11	CARBON	10	5%	1/4W	F
R513	1-249-437-11	CARBON	47K	5%	1/4W	
R514	1-249-417-11	CARBON	1K	5%	1/4W	F
R515	1-215-455-00	METAL	27K	1%	1/4W	
R517	1-247-856-00	CARBON	11K	5%	1/4W	
R518	1-247-852-11	CARBON	7.5K	5%	1/4W	
R519	1-247-856-00	CARBON	11K	5%	1/4W	
R520	1-247-852-11	CARBON	7.5K	5%	1/4W	
R521	1-249-440-11	CARBON	82K	5%	1/4W	
R522	1-249-429-11	CARBON	10K	5%	1/4W	
R523	1-247-862-11	CARBON	20K	5%	1/4W	
R524	1-249-429-11	CARBON	10K	5%	1/4W	
R525	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R526	1-249-437-11	CARBON	47K	5%	1/4W	
⚠R527	1-212-849-00	FUSIBLE	4.7	5%	1/4W	
⚠R528	1-212-849-00	FUSIBLE	4.7	5%	1/4W	
R529	1-249-435-11	CARBON	33K	5%	1/4W	
R530	1-249-435-11	CARBON	33K	5%	1/4W	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

MAIN **SW** **METER**

Ref. No.	Part No.	Description			Remark
R531	1-249-429-11	CARBON	10K	5%	1/4W
R532	1-249-417-11	CARBON	1K	5%	1/4W F
R533	1-249-429-11	CARBON	10K	5%	1/4W
R534	1-249-417-11	CARBON	1K	5%	1/4W F
R535	1-249-425-11	CARBON	4.7K	5%	1/4W F
R536	1-249-425-11	CARBON	4.7K	5%	1/4W F
R701	1-249-421-11	CARBON	2.2K	5%	1/4W F
R702	1-249-421-11	CARBON	2.2K	5%	1/4W F
R703	1-249-421-11	CARBON	2.2K	5%	1/4W F
R704	1-249-421-11	CARBON	2.2K	5%	1/4W F
R705	1-249-417-11	CARBON	1K	5%	1/4W F
R706	1-247-843-11	CARBON	3.3K	5%	1/4W
R707	1-247-807-31	CARBON	100	5%	1/4W
R709	1-249-424-11	CARBON	3.9K	5%	1/4W F
R710	1-249-421-11	CARBON	2.2K	5%	1/4W F
R711	1-249-417-11	CARBON	1K	5%	1/4W F
R712	1-249-417-11	CARBON	1K	5%	1/4W F
R713	1-249-433-11	CARBON	22K	5%	1/4W
R714	1-249-421-11	CARBON	2.2K	5%	1/4W F
R715	1-249-421-11	CARBON	2.2K	5%	1/4W F
R811	1-249-413-11	CARBON	470	5%	1/4W F
R812	1-249-413-11	CARBON	470	5%	1/4W F
R813	1-249-412-11	CARBON	390	5%	1/4W F
R815	1-249-408-11	CARBON	180	5%	1/4W F
R821	1-249-430-11	CARBON	12K	5%	1/4W
R822	1-249-424-11	CARBON	3.9K	5%	1/4W F
R823	1-247-838-00	CARBON	2K	5%	1/4W
		<VARIABLE RESISTOR>			
RV101	1-241-764-11	RES, ADJ, CARBON 10K (PB LEVEL L-CH)			(DECK A)
RV102	1-241-764-11	RES, ADJ, CARBON 10K (PB LEVEL L-CH)			(DECK B)
RV103	1-241-764-11	RES, ADJ, CARBON 10K (REC LEVEL L-CH)			
RV105	1-241-768-11	RES, ADJ, CARBON 220K (REC BIAS L-CH)			
RV107	1-223-850-11	RES, VAR, CARBON 20K/20K (REC LEVEL)			
RV201	1-241-764-11	RES, ADJ, CARBON 10K (PB LEVEL R-CH)			(DECK A)
RV202	1-241-764-11	RES, ADJ, CARBON 10K (PB LEVEL R-CH)			(DECK B)
RV203	1-241-764-11	RES, ADJ, CARBON 10K (REC LEVEL R-CH)			
RV205	1-241-768-11	RES, ADJ, CARBON 220K (REC BIAS R-CH)			
RV501	1-241-762-11	RES, ADJ, CARBON 2.2K (TAPE SPEED HIGH)			(DECK A)
RV502	1-241-762-11	RES, ADJ, CARBON 2.2K			(TAPE SPEED NORMAL) (DECK A)
RV503	1-241-762-11	RES, ADJ, CARBON 2.2K (TAPE SPEED HIGH)			(DECK B)
RV504	1-241-762-11	RES, ADJ, CARBON 2.2K			(TAPE SPEED NORMAL) (DECK B)
		<SWITCH>			
S701	1-762-580-11	SWITCH, PUSH (1 KEY) (POWER) (US,AUS,E)			
⚠S702	1-762-581-11	SWITCH, AC POWER PUSH (1 KEY) (POWER)			(AEP)
S801	1-762-251-11	SWITCH, SLIDE (DOLBY NR)			
S802	1-762-251-11	SWITCH, SLIDE (DECK A TAPE TYPE)			
S803	1-762-747-11	SWITCH, PUSH (1 KEY) (DUBBING SPEED)			
S804	1-762-748-11	SWITCH, SLIDE (DECK B TAPE TYPE)			
		<TRANSFORMER>			
T501	1-427-780-11	TRANSFORMER, BIAS OSCILLATION			

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Replace only with part number specified.

MEMO

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	1996.05	New
1.1	2002.10	Correction of exploded views parts list (Ref.No.76) . (RPC-02005)
1.2	2003.12	Supplement-1: Suffix change of the main, SW and meter board. (ENC-TCA00478)